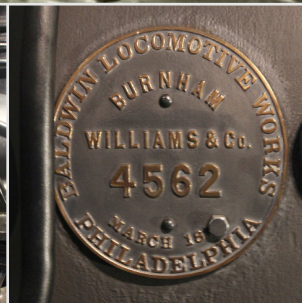
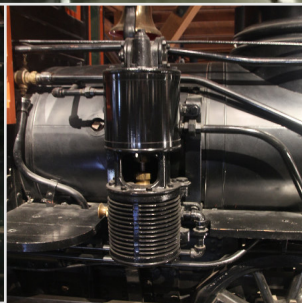


Nevada Short Line #1

STEAM LOCOMOTIVE

Research and Restoration Report



THE NEVADA SHORT LINE RAILWAY

LOCOMOTIVE NO. 1

RESEARCH AND RESTORATION REPORT

by

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PREFACE

This report is one of a series prepared on the various pieces being restored by the California State Railroad Museum. It provides a short history of the railroads owning and operating the locomotive restored as the Nevada Short Line No. 1. It is written basically as an "in-house" document, both to tell "what we did and why we did it" in the restoration of this piece.

Future researchers wishing additional material on the Nevada Central Railroad are referred to similar reports prepared on the locomotive "Sonoma" (which explains the narrow gauge concept), the Monterey and Salinas Valley combine car, and the Nevada Central passenger car, the "Silver State". All reports contain extensive information on the Nevada Central Railroad. For obvious reasons (over three lineal feet of shelf space) the file of photographs and other research material is not included with this report but remains in the archives of the California State Railroad Museum.

INTRODUCTION

On August 1, 1969, Baldwin Narrow Gauge Locomotive No. 4562 was presented by the Railroad and Locomotive Historical Society, Pacific Coast Chapter, to the State of California, Department of Parks and Recreation. The locomotive was given to the State of California, along with 39 other pieces of historic rolling stock, to be displayed in the California State Railroad Museum, to be opened in 1980 in Sacramento, California.

This paper traces the history of the locomotive from 1878, when it was ordered, till 1978, when the restoration was completed. Included within that history will be a discussion of the Baldwin Locomotive Works; the various lines that the locomotive ran on from 1879 till 1938; its history from 1938 till it was presented to the State of California; and the process of restoration that was carried out on the locomotive from 1977 to 1978.

BALDWIN LOCOMOTIVE WORKS

The Baldwin Locomotive Works was founded in 1825 by Matthias W. Baldwin, and was reorganized after his death in 1867 as the Baldwin Locomotive Works, M. Baird and Company Proprietors. George Burnham and Charles T. Parry were associates with Baird in the co-partnership. In 1870, Edward H. Williams became a member of the firm.

The first narrow gauge locomotive constructed by the Baldwin Locomotive Works was built in 1868.¹ This locomotive was of 3-1/2 foot gauge and was built for the Averill Coal and Oil Company of West Virginia. In 1869, three more locomotives of the same gauge were constructed for the Uniao Valenciana Railway of Brazil, and were the first narrow gauge locomotives to be constructed at the Baldwin Locomotive Works for general passenger and freight traffic.²

Eleven years later, in 1879, the Baldwin Locomotive Works built 78 narrow gauge locomotives.³ One of these 78 narrow gauge locomotives was Baldwin No. 4562, a three-foot gauge 2-6-0, class 8-18-D, built for the Utah & Northern Railroad. The Baldwin catalog of 1877 defines the class 8-18-D as a narrow gauge freight locomotive, a Mogul, capable of pulling both freight and passenger traffic.⁴

The locomotive was ordered by the Utah & Northern Railroad Company on December 23, 1878, as part of an order for 13 similar locomotives.⁵ The locomotive was completed sometime in 1879 and was assigned the builder's plate No. 4562. The builder's specifications call for the locomotive to be numbered as No. 13, with no name specified, and to be built to use soft coal fuel.⁶

THE UTAH NORTHERN PERIOD

The Utah Northern Railroad Company was organized on August 23, 1871,⁷ and was to run from Ogden, Utah, to Soda Springs, Idaho.⁸ Fearing that eastern capitalists would try to seek a controlling interest in the railroad, the people along the line agreed to "go to work and build the railroad and take stock for grading and tying the road".⁹

The Utah Northern Railroad Company decided on the use of narrow gauge track because of its lower cost, smaller curve radius, and overall economy and efficiency over standard gauge track.¹⁰

By June 1872, five locomotives were functioning on the line, all of which were coal burners. Two more locomotives were added in 1872.¹¹ The first group of locomotives was produced by the Grant Locomotive Works at Paterson, New Jersey.¹² The later were of an unspecified type. These locomotives were mostly involved in road construction and the pulling of freight, for it was not until June 8, 1872, that the first passenger train was operated.¹³

The construction of the Utah Northern from Ogden to Franklin had cost the company \$1,400,000.¹⁴ The company was not making money, however, and by 1875, could not meet its financial obligations.¹⁵ Under these circumstances, the directors of the Utah Northern were susceptible to plans for reorganization and financing. Jay Gould, of the Union Pacific, was interested and arranged for the Union Pacific purchase of the Utah Northern Railroad.¹⁶

In January 1877, the company was reorganized and the name changed to the Utah & Northern Railway Company, and was absorbed into the Union Pacific system.¹⁷ On April 30, 1878, the Utah & Northern was incorporated under the general laws of the Utah territory.¹⁸ By an act of Congress, approved on June 20, 1878, the Utah & Northern was given permission to build in Idaho and Montana, under the same rights and privileges that the line was accorded in Utah.¹⁹

The Utah & Northern ordered on December 23, 1878, from the Baldwin Locomotive Works (Burnham, Parry and Williams), one of seven 2-6-0's, classification 8-18-D. This locomotive was to be numbered No. 13, and was delivered to the Utah & Northern sometime in 1879.²⁰ The role of the locomotive on the Utah & Northern Railway is not known at this time. But, since it was from the Mogul class, it is conceivable that it could have performed mixed duties - pulling both freight and passenger trains.

The locomotive was renumbered, from the Utah & Northern No. 13 to the Union Pacific No. 17, in 1885 when the Union Pacific standardized its numbering system on all its subsidiary lines.²¹

A major change in the Utah & Northern Railway occurred on July 24, 1887, when it was changed from narrow gauge to standard gauge.²² The 262-mile section between Pocatello, Idaho, and Garrison, Montana, was changed in one day.²³ The Utah & Northern route from McCammon to Ogden, however, was changed to standard gauge in 1889-90, and the old route was altered and shortened.²⁴

Between 1879 and 1899, it appears that the Utah & Northern was gradually liquidating their narrow gauge equipment. The Ilwaco Railroad & Navigation Company bought a 2-6-0 Baldwin from the Utah & Northern in 1888 for \$2,500.²⁵ The Portland & Willamette Valley Railroad, in 1887, also bought a 2-6-0 Baldwin from the Utah & Northern.²⁶ These locomotives were built in 1879 and 1880, respectively.²⁷ The locomotive that we are most concerned about was not sold until 1899, and was then purchased by the Golconda & Adelaide Railroad in Nevada.

THE GOLCONDA & ADELAIDE RAILROAD PERIOD

The Golconda & Adelaide Railroad stretched only 11-3/4 miles between the towns of Golconda and Adelaide, Nevada. The main purpose for building the railroad was the transportation of minerals from Adelaide to Golconda, which was a stop on the Central Pacific.²⁸

Between 1888 and 1889, there was mine and furnace development taking place in Adelaide.²⁹ On October 28, 1896, the Glasgow & Western Exploration Company, Ltd., was formed to reopen the Adelaide Copper Mine.³⁰

In April of 1897, a subsidiary company was formed, the Adelaide Stars Mine, Ltd., with the express purpose of acquiring the Adelaide Copper Mine, as well as the Star and Grey Eagle mines at Cherry Creek in eastern Nevada.³¹ As the Adelaide mine began to produce, the Glasgow & Western Exploration Company, Ltd., felt that it would be advantageous to build a railroad from the mine to Golconda.

A three-foot gauge railroad was decided on as being the most practical, and in September of 1898, the survey was completed.³² By October 10, 1898, the grading had been completed, the rails were on hand - but the ties had not yet arrived.³³ It was not until December 15, 1898, that the ties arrived, and by January 1899, the final rails were spiked in place.³⁴

A locomotive was acquired around October 10, 1898.³⁵ And since the records show that the Golconda & Adelaide had only one locomotive³⁶ (the ex-Union Pacific No. 17), it would seem safe to assume that it was purchased from the Union Pacific in 1898 and not delivered until 1899. The locomotive ran for only a little over a year before both the mine and railroad were closed in June 1900.³⁷

From 1907 to 1910, the mine as well as the railroad were re-activated.³⁸ The mine was again shut down, railroad service discontinued, and the line lay idle for several years, until it was acquired by the Sugarman Iron and Metal Company.³⁹ In 1914, the Sugarman Iron and Metal Company sold the rails and equipment to the Nevada Short Line Railroad, Rochester, Nevada.⁴⁰

THE NEVADA SHORT LINE RAILWAY PERIOD

The Nevada Short Line Railway was originally constructed in 1913 and, like the Golconda & Adelaide Railroad, was built primarily to transport minerals from the mines to the mill and to the Southern Pacific transcontinental connection at Oreana. The Nevada Short Line was extended in 1914 and again in 1915, but the overall length of the line never exceeded 12 miles.⁴¹

With the increase of trackage in 1914, it became necessary to acquire more motive power. The "new" locomotive, the ex-Golconda & Adelaide Baldwin No. 4562, was purchased from the Sugarman Iron and Metal Company for an undisclosed amount.⁴² The locomotive became the Nevada Short Line No. 1, and was routed through the Southern Pacific shops at Sparks, Nevada, before it entered service on the Nevada Short Line.⁴³

On January 15, 1915, the Nevada Short Line initiated passenger service which, along with its freight traffic, put a great strain on its motive power. The Nevada Short Line roster for 1915 consisted of: two steam locomotives, a shay, two box cars, a number of flat cars, a passenger car, and "Mike".⁴⁴ Mike was a 60-horsepower Winton automobile equipped with railroad trucks, with a homemade cab and affectionately called a "locomotive".⁴⁵ One locomotive was the Baldwin No. 4562, the other was leased from the Hobart Mills. The shay was from the Iron Mountain Railway and was on hand at least by 1915.

In April 1915, the final extension of the Nevada Short Line Railway was started. On August 23, 1915, the two-mile extension was completed.⁴⁶ On September 9, 1915, one of the Nevada Short Line locomotives made a trial run to test the newly installed air brakes.⁴⁷ The records are unclear as to which locomotive the air brakes were installed on. However, it may have been the shay, which had just returned after being repaired by the Southern Pacific shops at Sparks, Nevada.⁴⁸

The Nevada Short Line was plagued by one setback after another. The most serious one occurred on November 30, 1915. On that date, at 7:00 p.m., a fire burned down the roundhouse and machine shops of the Nevada Short Line at Nenzel. The newspaper account of the fire says that "included in the loss are two automobiles, and that two locomotives have been secured to handle the work of the road".⁴⁹ It seems strange that if "two automobiles" were destroyed, why it would be necessary to procure "two locomotives" to handle the traffic. Another account says that two locomotives were destroyed, but does not specify which locomotives.⁵⁰ Still another account says that two locomotives were destroyed, a 24-ton Porter, and a locomotive numbered No. 6.⁵¹

Even though the extent of the damage to the motive power of the Nevada Short Line is unclear, the fire did cause considerable damage and stopped the movement of ore to the mills for several weeks.⁵² Because of this and the general overall poor performance of the railroad, an aerial tram was built between the mines and the mill in 1917. This was the final blow to the Nevada Short Line, and in 1917 the railroad was put up for sale for delinquent taxes. Though the line could be purchased for \$120.23, the amount of the

delinquent taxes, there was no buyer until the early part of 1918. At that time, H. J. Humphries purchased the line and tried to revitalize it by adding more cars. Unfortunately, his attempt failed, and in 1920 scrap dealers moved in and tore up the rails.⁵³

The Nevada Short Line Locomotive No. 1 (Baldwin No. 4562) was advertised for sale in the July 16, 1920, issue of Railway Age magazine for \$3,000 F.O.B., Oreana, Nevada.⁵⁴ In November of 1920, James W. McCulloch, Vice-President of the Nevada Central Railroad, gave permission to J. M. Hiskey, General Manager of the Nevada Central Railroad, to purchase the Nevada Short Line Locomotive No. 1.⁵⁵ The locomotive was renumbered No. 6 by the Nevada Central, and moved to the last line where it saw active service.⁵⁶

THE NEVADA CENTRAL RAILWAY PERIOD

By 1872, Austin was the second largest city in Nevada; however, being 93 miles south of Battle Mountain (the nearest stop on the Central Pacific), the people of Austin were in need of a railroad to connect with the Central Pacific. The major promoter for the railroad was M. J. Farrell, Secretary of the Manhattan Silver Mining Company. By February 1875, Farrell had convinced the Nevada Legislature of the benefits of a railroad from Battle Mountain to Austin.⁵⁷ The Nevada Legislature in turn authorized Lander County to grant \$200,000 of its bonds as a subsidy to encourage the building of the railroad - but a time period of five years was set as the deadline for completion of the line.⁵⁸

Farrell then started to look for other backers, as the \$200,000 was not to be paid until the line was completed. On March 25, 1878, the Nevada Railway was formally organized, but still no backers were available.⁵⁹ Then in August of 1879, Anson Phelps Stokes became interested in financing the building of the three-foot gauge from Battle Mountain to Austin. The Nevada Railway was reincorporated on September 15, 1879, and became the Nevada Central Railway.⁶⁰ Work had to begin soon, as February 9, 1880, was the date of the expiration of the bond subsidy.⁶¹

On January 23, 1880, there was still 25 miles of track to be laid.⁶² Miraculously, come February 9, 1880, the track was laid to Austin, the Nevada Central Railway was awarded the bond money, and the people of Austin on the

whole were exuberant.⁶³ This exuberance was short lived, for by the spring of 1881 business on the Nevada Central had fallen to half its volume.⁶⁴ On June 16, 1881, the Union Pacific Railroad purchased the Nevada Central as part of a proposed route to California.⁶⁵ By 1884, the Union Pacific, having financial troubles of its own, let the Nevada Central slip into receivership. The following year, the railroad was sold at a bankruptcy sale, and was placed back in the hands of Anson Phelps Stokes.⁶⁶

On November 1, 1888, a new company was formed, and the Nevada Central Railway became the Nevada Central Railroad, with Stokes firmly in control.⁶⁷ The railroad was able to eke out a meager existence, as the mines that the traffic was based on gradually closed. In fact, in 1911 most of the traffic on the railroad was from the livestock industry and not from mining.⁶⁸

In November 1920, James McCulloch, Vice-President of the Nevada Central, gave J. M. Hiskey permission to buy the Nevada Short Line Locomotive No. 1 that was advertised for sale.⁶⁹ The price paid for the locomotive is not known, but on February 7, 1922, the locomotive was insured for \$1,000.⁷⁰ Again, in October 1925, the locomotive carried an insurance value of \$1,000.⁷¹ The locomotive had soon been renumbered No. 6 by the Nevada Central.⁷²

By 1931, time had run out for No. 6. In a letter to J. M. Hiskey, J. W. McCulloch writes - "that #6 can be repaired but that #5 and #2 are really the only two good engines that you have . . ."⁷³ On August 14, 1937, the locomotive was described as "loco. 6 out of service/scrap".⁷⁴

The Nevada Central would not last much longer either, for on December 20, 1937, the Interstate Commerce Commission granted the Nevada Central permission to abandon the line.⁷⁵ An agreement was made between Hyman-Michaels Company and the Nevada Central Railroad Company on January 12, 1938, for the purchase of the railroad for scrap.⁷⁶ Hyman-Michaels agreed to pay "\$22,500 for all the rails, angle bars, spikes, frogs, switches, turnouts, and other track materials and track accessories . . ."⁷⁷

The tender from the Nevada Central No. 6 was modified and used as an auxiliary tank car when the rails were torn up. The oil tank was reinstalled (backwards) to carry additional water and couplers were installed on both ends.⁷⁸ It is unclear if the locomotive was in running condition at this time, but more important was the donation of the locomotive by Hyman-Michaels to the Railway and Locomotive Historical Society, Pacific Coast Chapter, for preservation.⁷⁹

POST-NEVADA CENTRAL RAILWAY PERIOD

In 1938, the locomotive, along with Nevada Central Locomotive No. 5, was shipped to the Southern Pacific shops in Berkeley, California, and was "being overhauled and restored to antique appearance".⁸⁰ The locomotives were being restored for use in the Wedding of the Rails scenes of the pageants "Cavalcade of the Golden West" (February 18 - October 29, 1939) and "America! Cavalcade of a Nation" (May 25 - September 29, 1940).⁸¹ Gilbert Kneiss, in a letter to J. M. Hiskey, wrote that "at the Fair . . . the Nevada Central No. 6 portrayed the Union Pacific standard gauge locomotive No. 119, while the Nevada Central No. 5 played the Central Pacific 'Jupiter'".⁸²

After the end of the first Treasure Island Exhibition, there was a question as to whether the Fair would open the next year as scheduled. Stanley Merritt wrote to J. M. Hiskey concerning this matter . . .

In a few days the 'Fair' will decide on the matter of opening during 1940. Until this matter is settled, we will take good care of the #5 "Jupiter", together with the #6 and coaches. They will be taken to 'West Oakland' and put under cover for safekeeping.⁸³

In 1939, some question arose over how the Pacific Coast Chapter of the Railway and Locomotive Historical Society (R&LHS) had acquired the Nevada Central No. 6, No. 5, and the two coaches. In a letter to Stanley Merritt, J. M. Hiskey cleared up the matter. Hiskey wrote that at the present time he was still the owner of the No. 5 and had no desire to sell it, but did "desire its preservation for historical purposes . . ." Further . . .

The Silver State private car was donated to the Society, (while) Engine 6 and the combination coach were originally sold to Hyman-Michaels Company in a blanket sale of scrap material, but were also later donated to the Society.⁸⁴

Once again, in 1940, the two locomotives and the two coaches performed in the Wedding of the Rails pageant. After the end of the Fair, the equipment was moved to the Southern Pacific shops in West Oakland, California, for storage. The equipment was to be stored there pending the opening of the Transportation Museum in the Palace of Fine Arts.⁸⁵ However, the "present war emergency has forced the postponement of our plans for a permanent museum".⁸⁶ Southern Pacific, not willing to store the pieces indefinitely, suggested a new storage place be found. The Railway and Locomotive Historical Society, Pacific Coast Chapter, used the money from the rental of the pieces to the "Fair" to secure a piece of ground in Berkeley, at the Pacific Guano Company, where they "erect(ed) a building" for shelter.⁸⁷

The equipment remained at the Pacific Guano Company until July of 1950. The June issue of the Railway and Locomotive Historical Society Chapter News said "the two n.g. engines and two n.g. passenger cars must be moved within three weeks".⁸⁸ The August 1950 Chapter News reported that "the two n.g. steam engines and two n.g. coaches were moved from Berkeley to Moore Shipyards about three weeks ago".⁸⁹ Once again the pieces were to be cleaned up as it looked like they were going to find a home in the Aquatic Park Transportation Museum in San Francisco that was to be opened soon.⁹⁰

In March of 1953, the equipment was moved from the Moore Shipyards to Gilmoore Steel.⁹¹ The pieces were again moved in 1958, this time to the Western Pacific Roundhouse in Oakland, California.⁹²

Hopes were still running high that the museum at the Aquatic Park would be built. In March of 1964, the Railway and Locomotive Historical Society, Pacific Coast Chapter News lists the opening of the museum as at least two years away (1966). Once again the equipment was to be moved - this time to the "old Key System service building located just off the toll plaza on the Oakland side". All of the equipment presently stored at the Western Pacific Roundhouse in Oakland was to be moved.⁹³

On August 5, 1964, the Railway and Locomotive Historical Society, Pacific Coast Chapter, received the okay to move the equipment to the old Key System maintenance building. August 11, 1964, was the day of the move; the narrow gauge equipment was moved in on standard gauge flat cars to await the laying down of narrow gauge track.⁹⁴

The October 1964, Chapter News reported that "forces of the Oakland Terminal had put the last section of narrow gauge track in place . . ." Baldwin Locomotive No. 4562 was . . .

first off the standard gauge flat car, and when it came time to pull it into the building the engine wouldn't budge. Twenty-four years of not turning a wheel had apparently rusted and expanded moving parts . . . The rails were greased and shortly after noon the engine was in place in the building.⁹⁵

As of April, 1965, it still looked hopeful for the equipment to go on display in the Aquatic Park Transportation Museum.⁹⁶ This museum was never to materialize. The equipment stayed at the old Key System maintenance building, its fate yet to be decided. On March 1, 1969, the fate of the equipment was decided, for on that date the Pacific Coast Chapter of the Railway and

Locomotive Historical Society signed a "Gift Déed" granting 15 pieces of historic rolling stock to the State of California. The provision of the "deed" was that . . .

they would be displayed at the old Sacramento Historic Park, maintained in first class condition and be kept indoors protected from the elements and away from vandalism.⁹⁷

On September 16, 1977, the Baldwin Locomotive No. 4562 was moved to the California State Railroad Museum's Unit Shop, Sacramento, California, for restoration to its 1920 appearance on the Nevada Short Line.⁹⁸ The restoration was completed in July of 1978, and on July 7, 1978, the locomotive was moved from the Unit Shop and placed in storage at the California State Railroad Museum, West Sacramento facilities. The locomotive will be stored until the museum opens in 1980. Once the museum is open, the locomotive will be part of an exhibit depicting a 1920 freight train. The locomotive was restored to the Nevada Short Line No. 1, circa 1920 appearance, based on photographs when the locomotive was on the Nevada Short Line and on the Nevada Central, as well as pictures of similar Baldwin locomotives from the Utah & Northern.⁹⁹

RATIONALE FOR RESTORATION

Several alternatives were presented in the restoration of this locomotive. From its past history it might have legitimately been restored as a locomotive of the Utah & Northern, the Oregon Short Line and Utah Northern, the Union Pacific, the Golconda & Adelaide, the Nevada Short Line, or the Nevada Central. Additional possibilities also were to restore the locomotive to its appearance of 1939-40 when it had been seen by thousands of people at Treasure Island, while yet another possibility was to clean up and paint the locomotive, leaving it essentially as it arrived in our restoration shop.

Research brought out few photographs of the engine, and the larger share of these were from the period of operation on the Nevada Central and the 1939-40 appearance at Treasure Island. No photos were located showing the engine when on the Utah Northern, the Oregon Short Line and Utah Northern, or the Union Pacific. This fact alone would have made restoration to a locomotive of one of the above railroads a difficult one with considerable "educated guessing" as to the paint schemes, equipment installed, as well as overall appearance. Since the museum already possessed a narrow gauge box car, a tank car, and a caboose of the 1920's period, it was logical to restore the locomotive to this same period to form a complete narrow gauge freight train to aid in interpreting the narrow gauge railroads of California and the west. This decision then required restoration to an "as running" locomotive on either the Nevada Central or the earlier Nevada Short Line. Since the Nevada Central was

already represented by the Silver State passenger car, a broader spectrum of short line roads would be represented if the locomotive was restored as the Nevada Short Line No. 1. This was done.

From photographs it also could be seen that the tender, belonging to the engine, dated back to this period, which lent additional credibility to this restoration. It may be noted that as the many layers of paint were removed, the lettering "Nevada Short Line" and the Arabic numeral "1" appeared near the bottom layer of paint.

The locomotive was extensively photographed after arriving in the restoration shop and before work began on the piece. This photography recorded for the future the condition of the locomotive as received in the shop, and provided assistance in reassembling the locomotive.

Following are descriptions of the locomotive and changes made thereto at various times in its history:

c. 1914-1920 The early photographs of the locomotive were taken in front of the Nevada Short Line shops at Oreana (see Photographs 1 & 2). From these photographs the general appearance of the locomotive while on the NSL can be deduced. The cab is a replacement, and diverges from the original Baldwin design. The locomotive has a wood pilot and a link and pin front coupler; a large acetylene headlight with a gas line running between the gas generator, located on the left running board ahead of the cab, to the headlamp via the left handrail, following Central Pacific

practice; a tall handrail has been mounted atop the length of the pilot beam; washout plugs are only located in the near course of jacketing; and the engine is fitted to burn oil, with an oil tank placed in the fuel space of the tender.

- c. 1920-1938 The photographs taken while the locomotive was on the Nevada Central Railroad indicate the following alterations that were made by the NCRR: The existing pilot was sheathed in iron; the smokebox front and door were replaced; automatic couplers with coupler cut levers were added along with a new front coupler pocket; the air hose and line were shifted to the left side of the new coupler; the handrails were extended around the headlight bracket; a smaller, horizontal gas generator was placed behind a smaller, Nevada Central "standard" headlight, with a gas line running along the left side of the boiler to a light in the cab; a diamond smokestack with a tapered stack base was added; the cab from the Nevada Short Line period has been lowered by ten inches, and the armrests in the cab have been raised to compensate for these changes; sun visors have been added over both the fireman's and engineer's windows; tool boxes have been added to both water legs and to the rear of the tank; the handrails on the cab and tender have been altered; poling pole and pole hooks have been added to the left of the tender frame; trucks journal lids have been changed to the truck frames; the tender reservoir plumbing has been rearranged; a washout plug was added to the left side of the boiler under the handrail post just ahead of the steam dome base; the air line

from the air pump has been removed from the back-head of the boiler and relocated over the top of boiler to (left side) reservoir and triple valve. (See Photographs 3 through 7.)

- c. 1937-38 The tender was converted into an auxiliary water car for use on the scrap trains that were used to pull up the Nevada Central rails. The modification to the tender may or may not have been performed by the contractor (Hyman-Michaels). The oil and fuel tank supplied with the tender upon receipt from the Nevada Short Line had been removed from the tender. However, around 1920-21 it was reinstalled, but backwards, as it was needed to carry extra water. (The NCRR locomotives were all burning coal at the time.)

The draw-bar was replaced with a standard knuckle coupler with provision for a cut-lever.

A pipe with a globe valve was tapped into the inside front edge of the right side water leg. In order to help the flow of water between the two fuel tenders, ties and planks were stacked upon the tender floor with the tank body placed on top (gravity feed).

An air-brake retainer valve was attached to the bottom front edge of the right side collar.

The tender-top air reservoir was removed and replaced with a smaller reservoir, directly behind the lead tender truck on the right side. (See Photographs 8 and 9.)

c. 1939 Upon arrival in Oakland in 1939, the ex-Nevada Central Locomotive No. 6 was repaired and cleaned up for the pageants, "The Cavalcade of the Golden West" (February 18, 1939) and "America! Cavalcade of a Nation" (May 25, 1940). The locomotive was to portray the Union Pacific Locomotive No. 119, one of the original participants in the meeting of the engines upon completion of the transcontinental railroad at Promontory, Utah, in 1869.

Alterations included: a wood stave pilot, a new pilot beam, and a simulated link and pin rooster drawbar, while flag stanchions replaced the pilot beam handrail. New snifters replaced the missing pair, the deck apron was removed in front of the cylinders, a flat brass nosing was applied to the edges of the headlight baseboard, a New York oil headlight, case mounted, and a tall straight smokestack with a fake cap replaced the Nevada Central diamond stack.

A drain pipe was fitted beneath the smokebox front to catch excess water from leaking boiler tube. The pipe drained through an apron to the center of the track. The cylinders were refitted

with new head covers (which were missing in 1938). The blower line was refitted at the smokebox without the globe valve. The whistle was fitted with a spun-brass acorn on top. The older handrails were replaced with straight rails of heavy brass pipe, fitted with brass acorn finials on the forward ends, which ended near center of the smokebox (existing stanchions were reused).

The petcocks were eliminated from the boiler check valves, new running boards were installed with flat brass nosing on the edges, and wheel splashers with brass edge beading were added over the drive wheels. The boiler jacketing was replaced, and a brass wrapper was applied to the center of the steam dome and cylinders. The pop valves were lowered into the dome top. Brass sandpipes, straighter than the previous ones, replaced the older piping.

False wood arches were fitted to the front doors and forward side windows of the cab, together with relief arches placed over the pair of windows on the side of the cab. Two brass hand holds were placed on the rear side corners of the cab beneath the rear side windows, replacing the older, longer handrails. A pair of single cab steps was hung from the cab pedestals.

The locomotive's air-brake system was altered to operate on steam. The locomotive's equalizing valve and reservoirs were discarded.

The tender end sills were replaced together with the new multi-height drawhead pocket. The poling pole was eliminated from the tender frame. The oil tank was discarded as the locomotive was still fitted to burn coal. The nearest toolbox on the tender was removed, and the small dented patch on the left side of the tender was fitted and smoothed. The waterline fitted to the lower section of the right water leg was eliminated and plugged. (See Photographs 12 through 14.)

CONDITION OF THE LOCOMOTIVE ON RECEIPT AT SACRAMENTO

September 1977

Prior to the shipment of the narrow gauge 2-6-0 to Sacramento, its appearance could be best described as a combination of elements both from the 1939 and 1940 "Cavalcades" and a restoration performed by the Pacific Coast Chapter of the Railway and Locomotive Historical Society, in the early 1960's. Aside from a multi-colored paint job, the engine had received the following modifications:

The long pilot had been reinforced in several locations; at the tip with a triangular plate of steel, through which ran an eye/truss rod which, in turn, was attached to the pilot beam below the link coupler eye. A pair of opposing brace rods had been applied between the pilot beam and the pilot base in traditional fashion. The left side back vertical and pilot base were reinforced with an "L-shaped" steel bracket on the front and top sides, respectively.

The fourth stave on the left side of the pilot had been strengthened by a diagonal strap attached to the stave about three-inches up from the stave base with a single bolt; this strap then folded (between the pilot base and nosing) to the underside of the base and was attached there with one carriage bolt.

The false-capped straight smokestack had been modified into a "diamond" stack with the welded-on addition of a double cone which surrounded the older cap.

The whistle, headlight and bell from 1939 were missing, while the bell hanger and yoke remained.

The narrowest sections of both running boards had been replaced with rough sawn planks. The side nosing used in 1939-40 had not been reapplied.

The cab was in the poorest condition of all wood components of the engine. The front left top corner had been braced to a new left cab side corner by the addition of an "L-shaped" steel plate bolted to the front exterior wall and the interior side of the cab wall. The entire left corner and side had been repaired with a new wall of rough pine framing and plywood panelling.

The two original front windows and two front doors were missing. The doors had been replaced with two plywood "doors" rigidly fixed in place.

The forward left side windows had been replaced with twin-like types of plywood construction. The false arches applied to the left side window frames had been removed. The right side window frames were in 1940 condition except for paint. The cab's rear windows were intact.

The false relief arches over the left side window openings had been removed.

The right side false relief arches were intact.

Both of the vertical brass grab irons on the cab sides were missing.

On the whole, despite overall decay, makeshift repairs, and missing parts, the locomotive's outward appearance was similar to that of 1939-40.

Cab Interior

The cab seats were missing.

Both the water sight glass and the two injectors were of the stationary industrial type and were not in keeping with the appropriate style of fittings. These had been added for the engine's use in 1939-40.

Steam piping added across the backhead in 1939 to supply the locomotive air brake cylinders with steam, pushed the try-cock water trap out of line with the cocks.

A modern industrial steam gauge was affixed in the air brake gauge location. The large original steam gauge was missing. A rubber hose was tapped into the fireman's injector water supply to be used as a water hose for keeping coal dust down and the cab deck clean.

Both the Nevada and California boiler certificate frames were empty.

On the tender, both water leg toolboxes were missing. The tender frame was rotting, while the tank body was rusted through in a number of locations.

RESTORATION WORK DONE ON THE NEVADA SHORT LINE NO. 1

When Baldwin Locomotive No. 4562 was received at the California State Railroad Museum Restoration Shop, located in the Sacramento yards of Southern Pacific, the locomotive was referred to as the Nevada Central No. 6, the reason being that this was the last number the locomotive wore in service. During the restoration process, however, it was determined that the locomotive would be restored to its appearance on the Nevada Short Line, as the No. 1. Therefore, the references below to the No. 6 and the No. 1 are to the same locomotive, Baldwin No. 4562.

December 1977:

Date

- | | |
|----|---|
| 1 | Unbolted tender tanks and removed debris. |
| 8 | Removed cylinder heads and freed pistons on Locomotive No. 6. |
| 22 | Removed firedoor No. 6. |
| 28 | Pulled cab No. 6. |
| 29 | Pulled handrails, smokebox, front; replaced steam dome cover; repaired headlight bracket; removed steam brake piping No. 6. |

January 1978:

No report.

February 1978:

Date

- 1 Cleaned smokebox, firebox, and ash pan No. 6.
 - 3 Repaired brakehead on tender No. 6; continued work on tender tank No. 6.
 - 6 Continued work on tender tank No. 6.
 - 7 Disassembled tender frame and stripped parts No. 6.
 - 9 Cleaned nuts and bolts for No. 6 tender; sandblasted part of tank No. 6.
 - 10 Started assembly of tender frame.
 - 14 Installed truss rods, brake hangers, brake cylinder, check-chain hangers, cat-walk braces, and center plates for No. 6 tender.
 - 15 Mounted buffer plates No. 6 tender.
 - 16 Cropped rods No. 6; removed fittings from air reservoir.
 - 17 Completed tender frame assembly No. 6; riveted on manhole and tank tap on tender No. 6.
 - 21 Mounted bolster retainer brackets on tender trucks No. 6; added miscellaneous nuts and bolts to tender frame; sandblasted parts.
 - 22 Removed dome and jacket.
 - 23 Removed brake rigging; removed miscellaneous casting repairs.
 - 24 Fabricated and started assembly of tender brakes; fabricated stack.
 - 27 Fastened line lever supports to No. 6 tender frame; removed valve gear from No. 6.
- No. 6 will henceforth from this date be known as NSL No. 1 2-6-0 Mogul.
- 28 Removed eccentric straps from NSL No. 1; removed brake rigging from NSL No. 1.

March 1978:

Date

- 7 NSL No. 1 sandblasting.
- 8 Fabricate tank bracket for air tank NSL No. 1 and sandblast.
- 9 Fasten air tank to NSL No. 1 tender water tank; sandblast Locomotive NSL No. 1.
- 10 Sandblast NSL No. 1; disassemble headlight for sandblasting.
- 13 Finished sandblasting NSL No. 1; primed Locomotive No. 1.
- 14 Painted Locomotive No. 1; made air pipes and brackets for tender No. 1; cleaned miscellaneous parts Locomotive No. 1. No. 1 was painted black.
- 15 Dropped cellars Locomotive No. 6; put on stack, sanded dome and steam dome base; removed pilot deck. Paint and Refinishing - Finish touch-up was done on Locomotive No. 6 with black and graphite paint.
- 16 Locomotive No. 6 parts painted for tender and locomotive. Cleaned and installed pilot truck, lubrication and lines, headlight brackets, smokebox front, deck braces, and steam gauge stand.
- 17 Packed and installed cellars, removed cylinder cocks, burnished crossheads and guides, decked tender and set on tank, put on brake pipe, replaced check chain.
- 20 Locomotive No. 6 decking was finished. Cleaned ash pan, removed grate levers, made steam dome wrapper No. 6.
- 21 Decking was fitted inside of Locomotive No. 6 cab floor. Main reservoir pipe on tender, eccentric straps, blades and links installed; brake rigging installed.

March 1978: (Cont.)

Date

- 22 Fabricated door and hinges on cab; installed air pump, water connections; installed "some" cotter keys; installed brake lever supports; measured for gangway plate hinges; initial cleaning of left side rods; oiled and secured valve rod mechanism; dismantled fire wall on cab.
- 23 Fabricated packing gland, polished fittings on backhead. Made hinges and mounted apron on No. 6. Also, burnished side rods.
- 24 Polished fittings on backhead; repaired cab driver shields on No. 6.
- 27 Lagged boiler on No. 6; installed.
- 28-29 Plastered boiler.
- 30-31 Injector piping and pump piping; pilot tripper was started and finished for No. 6. Also, laminated wood for headlamp base for No. 6.

April 1978:

Date

- 3 Woodshop started planning wood for NSL No. 1 cab. Fitted running boards, straightened brackets.
- 4 Woodshop completed planning wood for NSL No. 1 cab, and started laying out parts to be cut. Fitted cab floor, made brackets for equalizing tank and brake piping, lengthened brackets for running boards, burnished and assembled reverse lever and quadrants.

April 1978: (Cont.)

Date

- 5 Woodshop began cutting parts for NSL No. 1 cab. Began mortising and matching parts. Fabricated flanges for inspection plugs, mounted cab floor, installed reverse lever reach rod NSL No. 1.
- 6 Finished matching parts for main structure of NSL No. 1 cab. Began fitting walls together. Fabricated and mounted water glass drains and tri-cock drain; fitted running boards; started jacketing the boiler for NSL No. 1.
- 7 Continued fitting cab walls for NSL No. 1. Fabricated brake valve brackets, fob-pilot decks extensions; mounted fire door and ring; started piping firing manifold for No. 1.
- 10 Workshop worked on cab for No. 1. Started piping air brakes, continued jacketing, and made bolts for cab.
- 11-14 Worked on cab walls. Air brake piping, jacketing, bolt making, mounted steam gauge. April 13, Ron Steiner painted lettering on steam gauge. Parts were laid out for cab windows, and doors were made for NSL No. 1.
- 17 Removed and cleaned and primed cab brackets; set cab on; finished air brake piping to tender; made equalizing tank brackets.
- 18 Repaired handrail posts.
- 19 Bolted down cab.
- 24 Mounted injector brackets on NSL No. 1. Work was done on NSL No. 1 interior trim of cab.
- 25 Made cab grab iron; replaced springs and suspension; mounted sand pipes on No. 1. Sanding and filling was done in interior of No. 1 cab.

April 1978: (Cont.)

Date

- 26 Finished trim and window for exterior of cab No. 1.
- 27 Installed tumbling shaft, pillow blocks, lifter links for No. 1.
- 28 Installed cylinder head covers, valve rods, cylinder cocks, headlight
No. 1.

May 1978:

Date

- 1 Installed counterbalance spring, bolt hole covers in cab; made
equalizing tank brackets. Completed fitting the windows for the cab.
- 2 Fabricated storm curtain hooks; cleaned and primed miscellaneous
piping; piped pump exhaust.
- 3 Installed brake pipe, injector water delivery and intake pipes;
mounted handrails; mounted duplex air gauge.
- 4 Fitted and installed cylinder cock reach rod. Did last touch-up upon
interior and exterior of cab.
- 5 Fabricated pilot steps.
- 8 Installed injector steam pipe and steam pipe to pump. Fitted doors
for cab.
- 9 Piped air gauge and lubricator. Completed pilot steps.
- 10 Installed overflow pipe.
- 15 Started layout on pilot for No. 1.
- 16 Started machining parts for pilot.
- 17 Installed bracket for overflow pipe. Began assembly of pilot.

May 1978: (Cont.)

Date

- 18 Piped steam delivery to compressor. Work was done on assembling the pilot. Also, started to rework the front cab walls. Completed rework on walls of cab.
- 19 Put canvas on roof. Laid out parts for new doors for cab of No. 1. Machined all parts, and glued and assembled doors.
- 20 Installed delivery pipe drain and removed main rod guides.
- 21 Mounted handrails and primed inside of cab.
- 22 Completed rework of front walls of cab. Finished assembling doors for cab.
- 26 Paint work was done on windows and doors of cab.
- 31 No. 1 was painted - interior finish coat green, exterior finish coat black.

June 1978:

Date

- 1 Worked on windows for cab. Mixed exterior window and door paint.
- 2 Mounted side rods, painted No. 1, and formed top of oil tank. Side windows were fitted.
- 5 Mixed window and door exterior paint. Painted cab windows and the interior part of the doors. Mounted main rods.
- 6 Second coat put on cab windows and the interior part of the doors. The tender deck plate was made and mounted.

June 1978: (Cont.)

Date

- 7 Applied first coat of paint to exterior of doors and windows.
- 8 Riveted filler spout to top of oil tank and fitted top of oil tank to tank and started drilling rivet bolts.
- 9 Finished drilling holes and started riveting. Fabricated pipe outlets. Rear windows were also worked on.
- 12 Continued riveting oil tank. Fitted window in rear of cab.
- 13 Windows for No. 1 were painted.
- 14 Completed riveting oil tank; added valve brackets and hatch lid hold downs; polished compressor intake strainer; fabricated tank hold downs. Glass was cut and installed in windows of cab.
- 15 Mounted front windows and builders plate.
- 16 Completed, sandblasted, and painted oil tank; fabricated dip stick.
- 19 Mounted oil tank and bolted it down. Fabricated brackets for lead truck wheel covers; tapped holes for fire door; drilled door ring. Hinges were fitted on doors and then mounted.
- 21 Touched-up paint; lettered cab, sand dome and tender.

In the restoration of the Nevada Short Line No. 1, several necessary pieces were unavailable. Where possible, the pieces needed were borrowed from other rolling stock in the California State Railroad Museum's collection.

The following pieces were from the North Pacific Coast No. 12, the "Sonoma":

- (1) Air pump
- (2) Lubricator
- (3) Tender air reservoir
- (4) Injector
- (5) Engine brake cylinders
- (6) Air equalizing valve
- (7) Water glass

From the Monterey and Salinas Valley No. 1 came:

- (1) Front coupler pocket

From the Nevada Central No. 3, the "Silver State" came:

- (1) Rear coupler pocket

From the California State Railroad Museum's West Sacramento Artifact Facility came:

- (1) Headlight
- (2) Cab brake valve
- (3) Steam and air gauges

The bell is from a Lima Shay, and was purchased in Idaho by Dick Denison. The bell is cracked and needs to be repaired, and the clapper should be shortened to fit the bell bracket clearances.

HISTORY OF THE UTAH NORTHERN

Utah & Northern (1877); the Oregon Short Line and Utah & Northern (1882); and finally as the Union Pacific (1899).

August 23, 1871	Utah Northern Railroad Company was organized to run from Ogden, Utah, to Garrison, Montana.
June 1872	Five locomotives were functioning on the line. All were coal burners. Two additional engines were added in 1872.
January 1877	The company was reorganized, the name changed to the Utah & Northern and absorbed into the Union Pacific system.
April 3, 1878	The actual absorption of the Utah Northern by the Utah & Northern interests was started.
April 30, 1878	The Utah & Northern was incorporated under the general laws of the Utah territory.
December 23, 1878	Utah & Northern ordered from Baldwin Locomotive Works (Burnham, Parry & Williams), one of seven 2-6-0's, classification 8-18-D. Assigned Utah & Northern No. 13 under Baldwin code of 8-18-D39.

January 24, 1879	The new articles of incorporation were filed with the Auditor of Public Accounts of the Territory of Utah.
c. 1879	Engine No. 13, builder's No. 4562, was completed by Baldwin Locomotive Works.
March 31, 1881	One of the most destructive fire occurred in the Logan Roundhouse. Five engines were destroyed.
April 14, 1881	Oregon Short Line Railways Company was incorporated under the general laws of Wyoming; under auspices of the Union Pacific.
December 31, 1881	Net earnings of the Utah & Northern for the year exceeded two million dollars.
c. 1882	The Utah & Northern No. 13 becomes an integral part of the Oregon Short Line.
c. 1885	Utah & Northern No. 13 becomes Union Pacific No. 17.
July 24, 1887	Railroad changed from narrow to standard gauge. The 262-mile section between Pocatello, Idaho, and Garrison, Montana, was changed in one day. The Utah & Northern route from McCammon to Ogden was changed to standard gauge in 1889-90, the old original route being altered and shortened.

1887 to 1890 Utah & Northern narrow gauge rolling stock and other equipment was disposed of. "Some of the engines went to the Nevada Short Line, Nevada Central, Ilwaco Railroad and Navigation, Portland and Willamette, and Eureka and Palisade. ...The engines were offered for sale at one hundred dollars each.

c. 1893 Oregon Short Line went down with the general crash.

c. 1899 Union Pacific No. 17 sold to Golconda & Adelaide. Number unknown though occasionally known as "Pearl".

Note: The Union Pacific maintained narrow gauge trackage on the old Utah Western route (Salt Lake City west to Tooele) until late 1890's. The locomotives may have been here between 1890 and 1899.

HISTORY OF GOLCONDA & ADELAIDE RAILROAD

October 1868 Central Pacific rails had been laid to Golconda Hot Springs.

c. 1888-1889 Brief mine and furnace development at Adelaide.

October 28, 1896 Glasgow & Western Exploration Company, Ltd., formed to reopen the Adelaide Copper Mine.

April 1897 A subsidiary company was formed, the Adelaide Stars Mine, Ltd., to acquire the Adelaide Copper Mine, plus the Star and Grey Eagle Mines at Cherry Creek in eastern Nevada.

September 1898 The surveys were completed for a 11-3/4 mile n.g. railroad between Golconda and Adelaide.

October 10, 1898 The grading was accomplished, started and done before the end of the month. The rails were on hand, and a locomotive had been acquired, but the ties had not yet arrived.

December 15, 1898 The ties had arrived and the first four miles completed.

January 1899 The final rails were spiked in place.

c. 1899 Union Pacific No. 17 (Baldwin No. 4562) sold to Golconda & Adelaide. Number unknown, though occasionally known as "Pearl".

June 1900 The mine and the mill were closed down, which forced suspension of the railroad service as well.

December 1904 There was talk of extending the line 50 miles farther south to Kennedy. Nothing came of this idea.

1907-1910 The smelter was redesigned and rebuilt, and the railroad was reactivated.

1910-1914 The railroad was acquired by the Sugarman Iron and Metal Company (dealer).

1914 The Sugarman Iron and Metal Company sold the rails and equipment of Golconda & Adelaide to the Nevada Short Line Railroad at Rochester, Nevada.

HISTORY OF NEVADA SHORT LINE RAILWAY

May 1913 The NSL was originally constructed in 1913, extended in 1914 and again in 1915, yet it never exceeded twelve miles.

July 31, 1913 The grading was completed and the track was laid.

August 9, 1913 A gasoline locomotive purchased in San Francisco was used to haul the first ore trains. Before the end of the month the gasoline locomotive had broken down. A steam locomotive was procured from Hobart Mills, California.

September 1913 The engine house at Nenzel was destroyed by a windstorm.

April 1914 The NSL was incorporated.

c. 1914 The line was extended six miles and, to compensate for the increased capacity of the new track, an additional locomotive (Baldwin No. 4562) was purchased from Golconda & Adelaide Railroad, through the intermediary of a scrap dealer. The locomotive was routed to the Southern Pacific shops at Sparks, Nevada, for repairs.

January 15, 1915 NSL initiated passenger service into Lower Rochester.
The roster of equipment at this time included: one steam locomotive, two box cars, a number of flat cars, and "Mike". ("Mike" was the frame and motor of a 60 h.p. Winton auto on two light railroad trucks and with a homemade cab, but called a locomotive.)

Early 1915 The mill and an extension on the railroad was completed.

April-August 1915 The Shay locomotive jumped the tracks and was so badly damaged it had to be sent to the Southern Pacific shops at Sparks, Nevada, for major repairs.

August 13, 1915 The rails were spiked in place for the final extension.

September 9, 1915 The first train made a trial run to test the newly installed air brakes.

November 30, 1915 A fire occurred at the shops in Nenzel. Myrick states that two locomotives were destroyed, but that they were not the No. 1 or the No. 2. The Lovelock Review Miner says that two automobiles were destroyed.

November 15 to
December 16, 1915 For weeks no ore was moved to the mills, causing the popularity of the railroad to decline.

December 16, 1915 A shay was obtained from the Mammoth Copper Company, California, and was well received by the local inhabitants.

January 1916 The Washoe County Bank asked the District Court in Reno to foreclose on the NSL.

c. 1916 A 24-ton Porter locomotive was in use while a Heisler was acquired from the Pacific Coast Borax Company. The roster at the end of the year included: three flat cars, two drop bottom cars, three ore cars, one freight motor, one passenger motor, and two steam locomotives.

April 1917 The tramway was completed between the mines and Lower Rochester, and took business away from the NSL.

Summer 1917 The NSL was put up for sale for delinquent taxes, which amounted to a grand total of \$120.23. Even at this low price there were no takers.

Early 1918 The NSL was taken over by H. J. Humphries, who purchased four freight cars and an auto passenger truck car from the NCO Railway.

July 1, 1918 The NSL was awarded the United States mail contract.

c. 1920 Western Machinery Company moved in and tore up the rails. The NSL Locomotive No. 1 was advertised for sale in the July 16, 1920 issue of Railway Age, for \$3,000 F.O.B., Oreana, Nevada.

HISTORY OF NEVADA CENTRAL RAILWAY

- c. 1872 Austin was the second largest city in Nevada.
- c. 1874 M. J. Farrell, Secretary of the Manhattan Silver Mining Company, set out to stimulate interest in a railroad from Austin to Battle Mountain, where the Central Pacific had a depot.
- February 1875 The Nevada Legislature authorized Lander County to grant \$200,000 of its bonds as a subsidy to encourage the railroad to build the road. However, the road had to be built within five years or the railroad would lose the money.
- March 25, 1878 The Nevada Railway was formally organized at a meeting held in San Francisco's Baldwin Hotel.
- July 1878 The route was completely staked, but there was still no money and no railroad.
- August 27, 1879 A new company was formed, and the name was changed to the Nevada Central Railway.
- August 30, 1879 Anson Phelps Stokes became interested in the proposition of a Nevada Central Railway.

September 15, 1879 The transfer of the surveys and franchises from the Nevada Railway to the Nevada Central Railway was accomplished at the Capital Hotel in Battle Mountain.

September to October 1879 The Nevada Central bought the old rail and two locomotives from the Monterey & Salinas Valley Railroad which was being converted to standard gauge by the Southern Pacific. The Nevada Central also bought from the Monterey & Salinas Valley, 54 cars, 38 miles of track, turntables, water tanks, and other equipment.

October 7, 1879 The Nevada Central bought one engine and ten freight cars from the Eureka & Palisade.

October 21, 1879 The first ten miles had been completed. Another ten miles were finished ten days later.

November 19, 1879 Thirty miles of track had been laid to date.

December 1879 General J. H. Ledlie took over and construction moved at a faster pace.

January 2, 1880 Forty miles of track were completed and twenty succeeding miles were laid during the month.

January 23, 1880 The end of the track was still 25 miles from Austin.

February 9, 1880	The date that the county bond subsidy was to expire arrived, the Nevada Central completed its obligation and was awarded the subsidy.
Spring 1881	Business on the Nevada Central had fallen to half its former volume.
June 16, 1881	The Union Pacific purchased the Nevada Central.
December 1881	The coach "Silver State" was completed at the Battle Mountain shops.
June 1884	The Union Pacific was having financial troubles, and Charles Adams was brought into the Union Pacific to resolve them. One of his first actions was to get rid of the Nevada Central.
October 1884	The Union Pacific failed to pay the October coupons on the railroad. Following this default, the Nevada Central was thrown into receivership the next year and sold at bankruptcy to the bondholders, which placed the railroad back in the hands of Anson Phelps Stokes.
November 1, 1888	A new company was formed - the Nevada Central Railroad, with Stokes in control.
c. 1904-1911	The mines in Austin were slowly closing.

- c. 1903 The Nevada Company's mines at Berlin (another Stokes property) supplied a full one-third of the freight traffic.
- c. 1907-1908 A substantial part of the road's business was derived from Manhattan and Round Mountain.
- c. 1911 Livestock movements provided a greater volume of business than mining.
- November 1920 James W. McCulloch, Vice-President of the Nevada Central Railroad, gave J. M. Hiskey permission to buy the NSL No. 1 that was offered for sale in Railway Age.
- February 7, 1922 The NSL No. 1 is now renumbered as NCRR No. 6 and is insured for \$1,000.
- May 1926 The Interstate Commerce Commission evaluated the Nevada Central Railroad at \$473,033, as of 1917.
- December 15, 1931 James W. McCulloch writes to J. M. Hiskey, "that we note that you are scrapping #1 as not worth repairing, as it is being robbed for repairs to #2; that #6 can be repaired but that #5 and #2 are really the only two good engines that you have..."

End of 1937

An application was made to the ICC for authority to abandon the line. The Commission consented on December 20, 1937.

January 31, 1938

The road was abandoned and scrapped by Hyman-Michaels. Fortunately, many pieces of the rolling stock were saved, and presented to the Railroad and Locomotive Historical Society, Pacific Coast Chapter. The rails and some equipment were sold for \$17,500.

CHRONOLOGY OF NEVADA SHORT LINE LOCOMOTIVE NO. 1

- December 23, 1878 Utah & Northern ordered from Baldwin Locomotive Works (Burnham, Parry & Williams), one of several 2--6-0's, classification 8-18-D. Assigned No. 13, under Baldwin code of 8-18-D39.
- c. 1879 Engine No. 13 completed by Baldwin Locomotive Works, and assigned builder's number 4562.
- c. 1885 Oregon Short Line, a Utah & Northern No. 13, becomes Union Pacific No. 17.
- 1887-1890 The old Utah & Northern line is converted to standard gauge, and most of the narrow gauge equipment is sold. The line between McCammon and Ogden, however, continued as a narrow gauge line until 1889-1890.
- c. 1899 Union Pacific's No. 17 was sold to Golconda & Adelaide Railroad, Golconda, Nevada. The new number for the locomotive, if any, is unknown, but there it was occasionally known as "Pearl".
- c. 1913 The Golconda & Adelaide Railroad was purchased for resale by the Sugarman Iron and Metal Company.

Mid-1914

The locomotive was acquired by the Nevada Short Line Railroad as No. 1 and was routed to the Southern Pacific shops at Sparks, Nevada, for repairs before being put into service. The earliest available photograph of No. 1 shows a Star-type oil headlight and whistle mounted atop the dome. The photograph also shows the oil-fuel tank in the tender. The Nevada Short Line lettering was of a silver/aluminum color. The locomotive was numbered No. 1.

c. 1915

Later photographs show the whistle has been moved to the rear of the dome, and the installation of a larger carbide-gas headlight.

November 30, 1915

"The Roundhouse and Machine Shops of the Nevada Short Line Railroad...burned to the ground...included in the loss are two automobiles." "The real disaster of the railroad (NSL) was the fire that destroyed the shops in Nenzel on November 30, (1915)...It destroyed two of the locomotives." "Indications are that the NSL may have had two other locomotives (besides the No. 1 and No. 2), which were destroyed by the fire in 1915."

c. 1920

Scrap dealers moved in and tore up the rails of the NSL, distributing some equipment to other railroads in the territory.

July 16, 1920 The Nevada Short Line No. 1 was advertised for sale in the July 16, 1920 issue of Railway Age magazine. It was offered for sale by the Western Machinery Company (of Salt Lake City) and Machinery Sales Agency, Balboa Building, San Francisco, for \$3,000 F.O.B., Oreana, Nevada.

November 29, 1920 The locomotive was purchased by J. M. Hiskey who was representing the Nevada Central Railroad Company, Austin, Nevada. The NSL No. 1 became the Nevada Central No. 6.

February 7, 1922 The replacement value of the locomotive was set at \$1,000.

October 31, 1925 The replacement value was reestablished at \$1,000.

December 15, 1931 Locomotive No. 6 could be repaired but...No. 5 and No. 2 were really the only two good engines.

February 1938 The tender from the No. 6 was modified to serve as an auxiliary water car with couplers installed on both ends, for Locomotive No. 2. The oil tank was reinstalled (backwards) to carry additional water. The tender was used on scrapper's trains to tear up the Nevada Central Railroad.

May 9, 1938 Everything except Locomotives No. 2 and No. 5 were sold to Hyman-Michaels (United Commercial Company) for \$2,000.

c. 1939-1940 Reconditioned by Western Pacific Railroad for use in
Wedding of the Rails scenes of the pageants "Calvacade of
the Golden West" (February 18, 1939) and "America!
Calvalcade of a Nation" (May 25, 1940). The locomotive,
the ex-NSL No. 1, portrayed the Union Pacific standard
gauge Locomotive No. 119.

October 17, 1939 The Silver State private car was donated to the Society
(R&LHS). Engine No. 6 and the combination coach (M&SV)
were originally sold to Hyman-Michaels Company in a
blanket sale of scrap material, but were also later
donated to the Society.

June 30, 1940 to Southern Pacific, West Oakland (storage).
June 2, 1941

June 2, 1941 to The locomotive was placed in storage at the Pacific Guano
July 7, 1950 Company, Berkeley, California.

July 7, 1950 to The locomotive was moved to the Moore Shipyards, Oakland,
October 1, 1969 California, for renovation by Western Pacific Railroad
crews in their spare time. After the renovation was
completed, it was anticipated that the locomotive was to
be moved to the Aquatic Park Museum, San Francisco,
California, for display. The locomotive was never placed
in the Aquatic Park Museum since the Museum was never
built. On October 1, 1964, it was moved to the Key System
Barn for continued storage.

August 1, 1969 The locomotive was presented by the Railroad & Locomotive Historical Society, Pacific Coast Chapter, to the State of California, Department of Parks and Recreation.

September 16, 1977 Moved to California State Railroad Museum's Unit Shop, Sacramento, California, for restoration to its appearance on the Nevada Short Line, for display purposes. The locomotive will be displayed in the motif of a 1920's freight train.

STEAM LOCOMOTIVE SPECIFICATIONSDate: May 17, 1979By: K. Bunker

Locomotive: Nevada Short Line #1 (built as Utah & Northern Railway #13)

Builder: Baldwin Locomotive Works (Burnham & Williams) Builder Number: #4562

Date Built: 1879 Date Ordered: 12-23-1878 Gauge: 3' 0"

Wheel Arrangement: 2-6-0 (Mogul) Driver Dia: 40" Type Bearings: Brass, babbit Others: 2 1/2 x 5" Main: 2" x 5"

Pilot Wheel Dia: 26" Type Bearings: Brass, 3 1/2" x 6"

Trailing Wheel Dia: (none) Type Bearings: _____

Type Brakes, engine: None as built but added later,
Westinghouse air, on drivers only; type G-6 brake valve

Driving Wheel Base: 11' - 8" Maximum Overall Wheel Base: 17' - 8"

Engine Weight 39,000 lbs.

Weight on Drivers: 33,000 lbs. Tractive Effort: _____

Total Weight, Engine & Tender: _____ Cylinder Size: 12' x 18"

Type Valve Gear: Stephenson Link, inside motion Type Valves: Slide, "D" style

Main Crankpin Size: _____ Others: _____

Main Rod Bearing Type: Brass, split Side Rod Bearing Type: Brass, split

Boiler Type: Straight-top, fire tube Boiler Builder Date: circa 1878-79

Boiler Construction: Iron, 3/8" thick, single lap seam, riveted construction Superheater: (none)

Number of Tubes: 124 Dia: 1 1/2" Length: 8' - 1 1/4" Tube Mat'l: Original - iron
Now steel

Firebox Length: 54 11/16" Height: 44 1/2" Width: 21 5/8" Grate Area: _____

Fuel: Bunker Oil Type of Burner: (missing, unknown type)

Number of Safety Valves: Two (2) Type: (unknown mfr.) both marked #1536 Last Date Set: circa 1940

Pressure Settings: (unknown) Blowdown Valve Type: _____

Number of Injectors: Two (2) Type, Left: _____ Right: Ohio, model "B"

Number Check Valves: Two (2) Type, Left: (unknown) marked #1537 Right: similar to left valve, no #.

Feedwater Pump: (None) Number of Water Sightglasses: One (1)

Type of Sightglasses: Cast glass, encased Other Water Equipment: (none)

Throttle Type: Balanced spool Location: In steam dome

Number Lubricators: One (1) Types: Nathan Bulls Eye, model #9, four sight, marked #812-18

Lubricator Locations: In cab (over)

STEAM LOCOMOTIVE SPECIFICATIONS

(2)

Number of Steam Gauges: One (1) Types: Ashcroft, auxiliary spring type
Number of Air Gauges: One (1) Types: New York Air Brake Co. PC 110 A6
Number of Cab Lights: 1 Types: Oil
Number Headlights: One (1) Type of Lights: Carbide Gas (converted from kerosene burning)
Number Back-up Lights: (none) Type of Lights: _____ Location: _____
Whistle Type: Single-note, brass bell construction. Location: rear of steam dome
Bell Type: Brass, rope-pull (replacement) Bell Dia: 13" Height: 10 1/2" Location: in front of cab
Communication/Signal Equipment: (none)
Steam Heat Equipment Type: (none)
Identification Numbers/Markings on Locomotive: (use add'l sheet if req'd)

Tender Type: Rectangular body, wood frame Tender Truck Type: archbar, steel bolsters

Number of Truck Wheels: Eight Dia. of Wheels: 26" Type Wheels: Single plate, cast iron

Type Wheels cont'd: _____

Type Bearings: Brass, babbit Journal Sizes: 3 1/2" xx 6"

Journal Sizes cont'd: _____ Fuel Cap'y: 250 gal.

Tender Weight Empty: Unknown Loaded: Unknown Water Cap'y: 1200 gal.

Tender Wheel Base: 136"

Identification Numbers/Markings on Tender: (use add'l sheet if req'd)

Right side water leg, between oil tank and leg wall marked by BLW 8-18D-39. Several tender truck journal covers marked UN or UP, circa 1885-1890.

Obvious Patches/Modifications to Locomotive and/or Tender (other than R.R. Museum Restoration changes/modifications), Explain: (use add'l sheet if req'd) drifting valves on steam chests circa 1900-1938 and are not original. Most original BLW appliances missing or replaced by later owners. Both builder's plates drilled thru circa 1899 and filled with hexbolts. Notch cut in top rear of steam dome upper ring casting (old whistle location?). Boiler check valves moved from second boiler course to first; old check openings plugged. Oil firing valve and burner (removed by NCRR circa 1922?) Cab successively modified from 1899, 1922, 1938 and 1952. Water feed valve on front of steam dome (added by U&N Ry) removed and plugged (by NSLRR?) Number plate may not be original & has markings indicating "21" but has been on engine since at least 1922; NSL number "1" missing since 1922. Gas/oil headlight original to NSL missing. Boiler barrel badly rusted and thin in spots, sheets bad, cracks in drypipes in a few locations. Air brakes were converted to steam by SP for '39-'40 Fair Cavalcade; missing parts included pump, reservoirs, valve and gauges came from backdated n.g. 4-4-0 #12 (NC #5). Headlight gas generator, piping and regulator valve also missing since 1922. Boiler water feed pipes and sand pipes altered by NCRR, returned to NSL configuration by CSRM. Whistle missing since 1940's; replacement from V&T #13 "Empire" was applied less brass acorn finial.

STEAM LOCOMOTIVE SPECIFICATIONS

(2)

Number of Steam Gauges: One (1) Types: Ashcroft, auxiliary spring type
Number of Air Gauges: One (1) Types: New York Air Brake Co. PC 110 A6
Number of Cab Lights: 1 Types: Oil
Number Headlights: One (1) Type of Lights: Carbide Gas (converted from kerosene burning)
Number Back-up Lights: (none) Type of Lights: _____ Location: _____
Whistle Type: Single-note, brass bell construction. Location: rear of steam dome
Bell Type: Brass, rope-pull (replacement) Bell Dia: 13" Height: 10 1/2" Location: in front of cab
Communication/Signal Equipment: (none)
Steam Heat Equipment Type: (none)
Identification Numbers/Markings on Locomotive: (use add'l sheet if req'd)

Tender Type: Rectangular body, wood frame Tender Truck Type: archbar, steel bolsters
Number of Truck Wheels: Eight Dia. of Wheels: 26" Type Wheels: Single plate, cast iron
Type Wheels cont'd: _____
Type Bearings: Brass, babbit Journal Sizes: 3 1/2" x 6"
Journal Sizes cont'd: _____ Fuel Cap'y: 250 gal.
Tender Weight Empty: Unknown Loaded: Unknown Water Cap'y: 1200 gal.
Tender Wheel Base: 136"

Identification Numbers/Markings on Tender: (use add'l sheet if req'd)
Right side water leg, between oil tank and leg wall marked by BLW 8-18D-39. Several tender truck journal covers marked UN or UP, circa 1885-1890.

Obvious Patches/Modifications to Locomotive and/or Tender (other than R.R. Museum Restoration changes/modifications), Explain: (use add'l sheet if req'd) drifting valves on steam chests circa 1900-1938 and are not original. Most original BLW appliances missing or replaced by later owners. Both builder's plates drilled thru circa 1899 and filled with hexbolts. Notch cut in top rear of steam dome upper ring casting (old whistle location?). Boiler check valves moved from second boiler course to first; old check openings plugged. Oil firing valve and burner (removed by NCRR circa 1922?) Cab successively modified from 1899, 1922, 1938 and 1952. Water feed valve on front of steam dome (added by U&NRY) removed and plugged (by NSLRR?) Number plate may not be original & has markings indicating "21" but has been on engine since at least 1922; NSL number "1" missing since 1922. Gas/oil headlight original to NSL missing. Boiler barrel badly rusted and thin in spots, sheets bad, cracks in drypipes in a few locations. Air brakes were converted to steam by SP for '39-'40 Fair Cavalcade; missing parts included pump, reservoirs, valve and gauges came from backdated n.g. 4-4-0 #12 (NC #5). Headlight gas generator, piping and regulator valve also missing since 1922. Boiler water feed pipes and sand pipes altered by NCRR, returned to NSL configuration by CSRM. Whistle missing since 1940's; replacement from V&T #13 "Empire" was applied less brass acorn finial.

FOOTNOTES

- 1 Baldwin Locomotive Works, Burnham, Parry, Williams & Co., Illustrated Catalog of Locomotives, (Philadelphia: J. B. Lippincott & Co., 1881; reprint ed., Berkeley, CA: Howell-North, 1960), p. 45.
- 2 Baldwin Locomotive Catalog, p. 45.
- 3 Baldwin Locomotive Catalog, p. 46.
- 4 Laurance S. Reid, The Narrow-Gauge Locomotives: The Baldwin Catalog of 1877. (Norman, Oklahoma, University of Oklahoma Press, 1967), p. 18.
- 5 Baldwin Locomotive Works, Burnham, Parry, Williams & Co., Baldwin Locomotive Specifications Order Sheet for class 8/18D locomotives for Utah & Northern Railroad, (Philadelphia, December 12, 1878), The De Golyer Foundation Library, Dallas, Texas.
- 6 Baldwin Locomotive Specification Order Sheet.
- 7 Merrill D. Beal, Intermountain Railroads Standard and Narrow Gauge, (Caldwell, Idaho, The Caxton Printers, Ltd., 1962), p. 7.
- 8 Beal, p. 4.
- 9 Beal, p. 7.
- 10 Beal, pp. 8-11.
- 11 Beal, p. 27.
- 12 Beal, p. 10.
- 13 Beal, p. 32.
- 14 Beal, p. 34.
- 15 Beal, p. 35.
- 16 Beal, pp. 36-38.
- 17 Beal, p. 38.
- 18 Beal, p. 41.
- 19 Beal, p. 41.
- 20 Baldwin Locomotive Specification Order Sheet.

- 21 Union Pacific Railroad Company, Locomotive Record Book (Omaha, Nebraska, June 1, 1885).
- 22 Beal, pp. 152, 167, and 170. Also see Raymond J. Feagans, The Railroad That Ran By The Tide, (Berkeley, CA, Howell-North Books, 1972) p. 19; Mallory Hope Farrell, Rails Sagebrush and Pine, (San Marino, CA, Golden West Books, 1967) pp. 13, 103; and George B. Abdill, Pacific Slope Railroads, (Seattle, WA, Superior Publishing Co., 1959), p. 52.
- 23 Beal, et al. in above footnote.
- 24 Beal, p. 170. Also additional work by Beal, "The Story of the Utah Northern Railroad" (Part 2), Idaho Yesterdays (Summer 1957), p. 22.
- 25 Feagans, p. 135.
- 26 Feagans, p. 135.
- 27 Feagans, p. 137.
- 28 David F. Myrick, Railroads of Nevada and Eastern California, Vols. 1 & 2, (Berkeley, CA, Howell-North Books, 1962), p. 63.
- 29 Myrick, Vol. 1, p. 63.
- 30 Myrick, Vol. 1, p. 63.
- 31 Myrick, Vol. 1, p. 63.
- 32 Myrick, Vol. 1, p. 65.
- 33 Myrick, Vol. 1, p. 65.
- 34 Myrick, Vol. 1, p. 65.
- 35 Myrick, Vol. 1, p. 65.
- 36 Myrick, Vol. 2, p. 890.
- 37 Myrick, Vol. 1, p. 65.
- 38 Myrick, Vol. 1, p. 65.
- 39 Myrick, Vol. 1, p. 65.
- 40 Myrick, Vol. 1, p. 65.
- 41 Myrick, Vol. 1, p. 57; also see Photograph 1.
- 42 Myrick, Vol. 1, pp. 58-59.

- 43 Myrick, Vol. 1, p. 59.
- 44 Myrick, Vol. 1, p. 59 and Vol. 2, p. 900.
- 45 Myrick, Vol. 1, p. 59.
- 46 Myrick, Vol. 1, p. 59.
- 47 Myrick, Vol. 1, p. 59.
- 48 Myrick, Vol. 1, p. 59.
- 49 Lovelock Review Miner, December 3, 1915.
- 50 Myrick, Vol. 1, p. 62.
- 51 Myrick, Vol. 2, p. 900.
- 52 Myrick, Vol. 1, p. 62.
- 53 Myrick, Vol. 1, p. 62.
- 54 Railway Age, July 16, 1920, p. 101; also see Photograph 2.
- 55 James W. McCulloch to J. M. Hiskey, November 29, 1920, Stokes Collection, Nevada State Historical Society, Carson City, Nevada.
- 56 See Photograph 3.
- 57 Myrick, Vol. 1, p. 66; and Kneiss, Gilbert H., Bonanza Railroads (Stanford University, CA, Stanford University Press, 1941), p. 106.
- 58 Myrick, Vol. 1, p. 66; and Kneiss, p. 106.
- 59 Myrick, Vol. 1, p. 66.
- 60 Myrick, Vol. 1, pp. 66-67; and Kneiss, p. 110.
- 61 Myrick, Vol. 1, p. 67; and Kneiss, p. 118.
- 62 Kneiss, p. 114.
- 63 Myrick, Vol. 1, p. 70; and Kneiss, p. 118.
- 64 Myrick, Vol. 1, p. 72.
- 65 Myrick, Vol. 1, p. 72; and Kneiss, p. 127.
- 66 Myrick, Vol. 1, p. 73.
- 67 Myrick, Vol. 1, p. 73; and Kneiss, p. 129.

- 68 Myrick, Vol. 1, p. 73.
- 69 McCulloch to Hiskey, November 29, 1920, Stokes Collection.
- 70 McCulloch to Hiskey, February 7, 1922, Stokes Collection.
- 71 McCulloch to Hiskey, October 31, 1925, Stokes Collection.
- 72 See Photograph 3.
- 73 McCulloch to Hiskey, December 15, 1931, Stokes Collection.
- 74 Stokes Family Papers, NC 31, Ctn #8, Nevada State Historical Society, Carson City, Nevada.
- 75 Kneiss, p. 131.
- 76 Hyman-Michaels Legal Agreement with Nevada Central Railroad, January 12, 1938; Bill of Sale, January 31, 1938; and Agreement of April 13, 1938; Stokes Collection, Box 6, Folder 41, Nevada State Historical Society, Carson City, Nevada.
- 77 Hyman-Michaels. See footnote No. 76.
- 78 See Photograph 8.
- 79 Kneiss, p. 131; and J. M. Hiskey, to Stanley F. Merritt, October 17, 1939, Stokes Collection.
- 80 Kneiss to Hiskey, January 2, 1939, Stokes Collection.
- 81 Golden State International Exposition, Official Guide Book, San Francisco, 1939 & 1940, California State Railroad Museum, Sacramento, CA.
- 82 Kneiss to Hiskey, January 2, 1939; also see Photographs 10 & 14.
- 83 Stanley F. Merritt to Hiskey, October 10, 1939, Stokes Collection.
- 84 Hiskey to Merritt, October 17, 1939, Stokes Collection.
- 85 Kneiss to Hiskey, June 2, 1941, Stokes Collection.
- 86 Kneiss to Hiskey, June 2, 1941, Stokes Collection.
- 87 Kneiss to Hiskey, June 2, 1941, Stokes Collection.
- 88 "Wind Blows Down Engine House Fence", Pacific Coast Chapter News, (Oakland, California, Railway and Locomotive Historical Society, June 1950.

- 89 "Narrow Gauge Equipment Moved", Pacific Coast Chapter News (Oakland, California: Railway and Historical Society, Inc., August 1950); "25 Years, a History of the Pacific Coast Chapter, Railway and Locomotive Historical Society, Inc.", 1962, p. 19.
- 90 "News of Our Equipment", Pacific Coast Chapter News (R&LHS, September 1950).
- 91 "Last Meeting", Pacific Coast Chapter News, (R&LHS, March 1953).
- 92 "Narrow Gauge Equipment", Pacific Coast Chapter News (R&LHS November 1958).
- 93 Pacific Coast Chapter News, (R&LHS, March 1964).
- 94 "New Storage Area for Our Rolling Stock", Pacific Coast Chapter News, (R&LHS, August 1964).
- 95 "Phase Two of Equipment Move Takes Place", Pacific Coast Chapter News, (R&LHS, October 1964).
- 96 "Museum", Pacific Coast Chapter News, (R&LHS, April 1965).
- 97 "Chairman's Annual Report", Pacific Coast Chapter News, (R&LHS, December 1969).
- 98 See photographs of move to Restoration Shop.
- 99 These photographs are included in the report. For Nevada Short Line, see Photographs 1 and 2; for the Nevada Central, Photographs 3 and 4.

BIBLIOGRAPHY

Abdill, George B., Pacific Slope Railroads, Seattle, WA: Superior Publishing Co., 1959.

Baldwin Locomotive Works, Burnham, Parry, Williams & Co., Baldwin Locomotive Specifications Order Sheet for class 8/18D Locomotives for Utah & Northern Railroad, Philadelphia, December 12, 1878, The De Golyer Foundation Library, Dallas, Texas.

Baldwin Locomotive Works, Burnham, Parry, Williams & Co., Dimensions, Weight, and Tractive Power of Narrow Gauge Locomotives, Philadelphia: J. B. Lippincott & Co., 1877; reprint ed., Norman, Oklahoma: Oklahoma University Press, 1967.

Baldwin Locomotive Works, Burnham, Parry, Williams & Co., Illustrated Catalog of Locomotives, Philadelphia: J. B. Lippincott & Co., 1881; reprint ed., Berkeley, CA: Howell-North, 1960.

Beal, Merrill D., Intermountain Railroads, Standard and Narrow Gauge, Caldwell, Idaho: The Caxton Printers, Ltd., 1962.

Beal, Merrill D., "The Story of the Utah Northern Railroad", Idaho Yesterdays (Summer 1957).

Feagans, Raymond J., The Railroad That Ran By The Tide, Berkeley, CA: Howell-North Books, 1972.

Ferrell, Mallory Hope, Rails Sagebrush and Pine, San Marino, CA: Golden West Books, 1967.

Golden Gate International Exposition, Official Program Books, San Francisco, 1939, 1940, Collection of California State Railroad Museum, Sacramento, CA.

Hyman-Michaels and Nevada Central Railroad Legal Agreement, January 12, 1938; Bill of Sale, January 31, 1938; and Agreement, April 13, 1938.

Kneiss, Gilbert H., Bonanza Railroads, Stanford University, CA: Stanford University Press, 1941.

Kneiss, Gilbert H., Letter to J. M. Hiskey, January 2, 1939, Stokes Collection.

Lovelock Review Miner, December 3, 1915.

McCulloch, James W., Letter to J. M. Hiskey, November 29, 1920, Stokes Papers, Nevada Historical Society, Carson City, Nevada.

Merritt, Stanley, Letter to J. M. Hiskey, October 17, 1939, Stokes Collection, Nevada Historical Society, Carson City, Nevada.

Myrick, David F., Railroads of Nevada and Eastern California, 2 Vols., Berkeley, CA Howell-North Books, 1962.

Pacific Coast Chapter News, Railway & Locomotive Historical Society, 1950-1969.

Railway Age, July 16, 1920.

Union Pacific Railroad Company, Locomotive Record Book, Omaha, Nebraska, June 1, 1885.

PHOTOGRAPHS

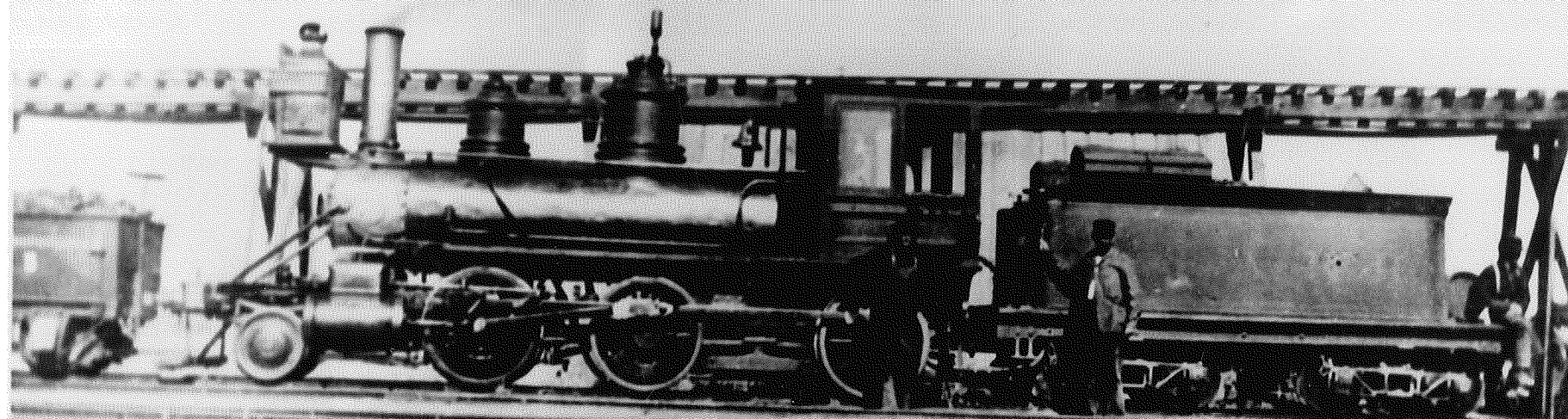
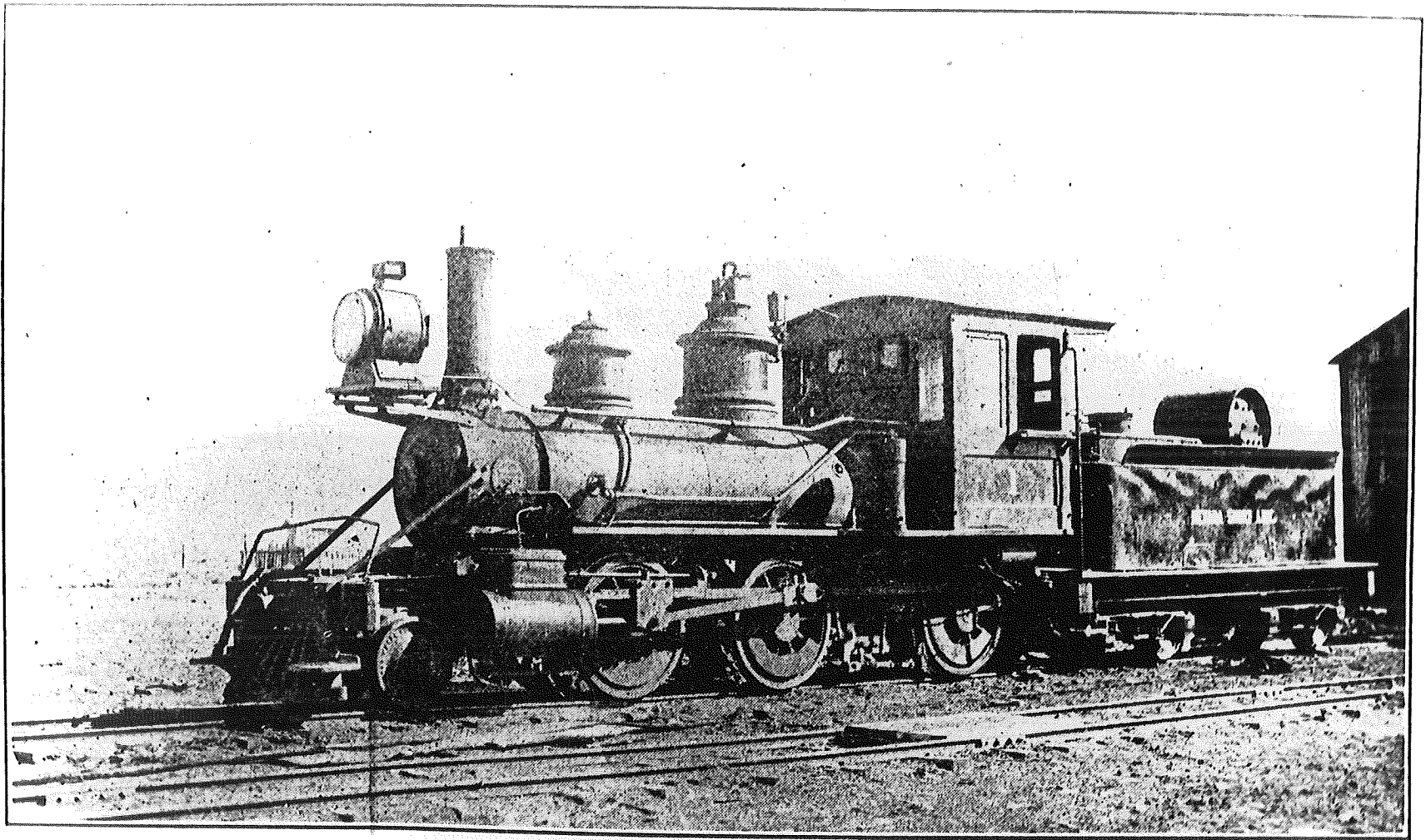


Photo 1A. The Nevada Short Line #1 at an earlier time when on the Galconda and Adelaide (Sometimes called the Glasgow and Western Railroad). While on the Galconda and Adelaide the locomotive was named "Pearl." (Ca. 1906).
Gilbert H. Kneiss Collection



Photo 1B. The Nevada Short Line #1 when operating on the Utah and Northern as their #13 in the mid 1880's. There is no information as to the group photographed or the event for which the photo was being taken (Original negative-Oregon Historical Society. Print Courtesy of Gerald M. Best)



We offer for immediate delivery the above 20-ton Baldwin Rod Locomotive, 36" gauge, Cylinders 12" Diameter, 18" Stroke.
Price FOB Oreana, Nevada.....\$3000.00

Photo No. 2 Nevada Short Line No. 1, for sale, at Oreana, Nevada.
Photo from July 16, 1920 issue of Railway Age.

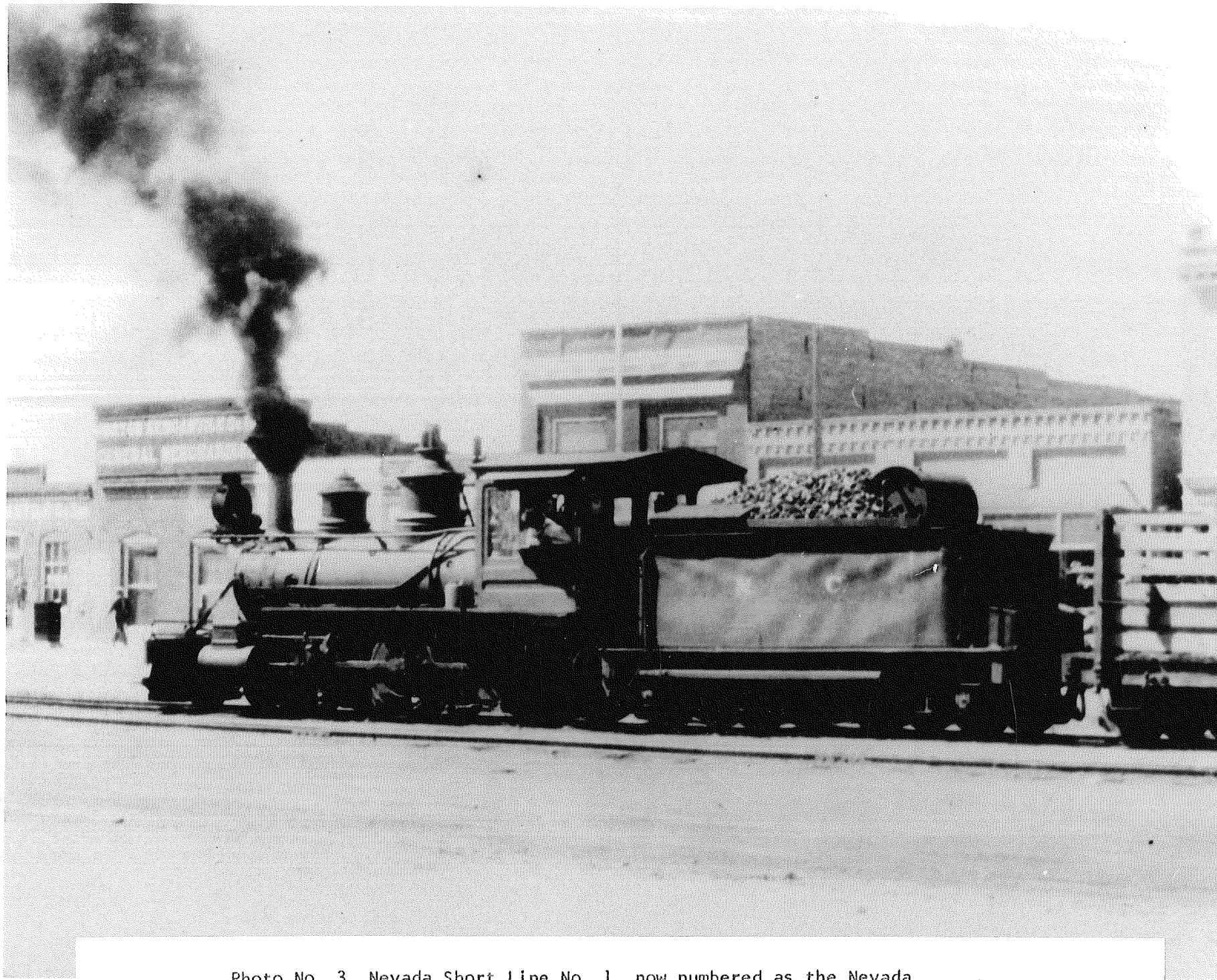


Photo No. 3 Nevada Short Line No. 1, now numbered as the Nevada Central No. 6, c. 1938. Photo: Bancroft Library.

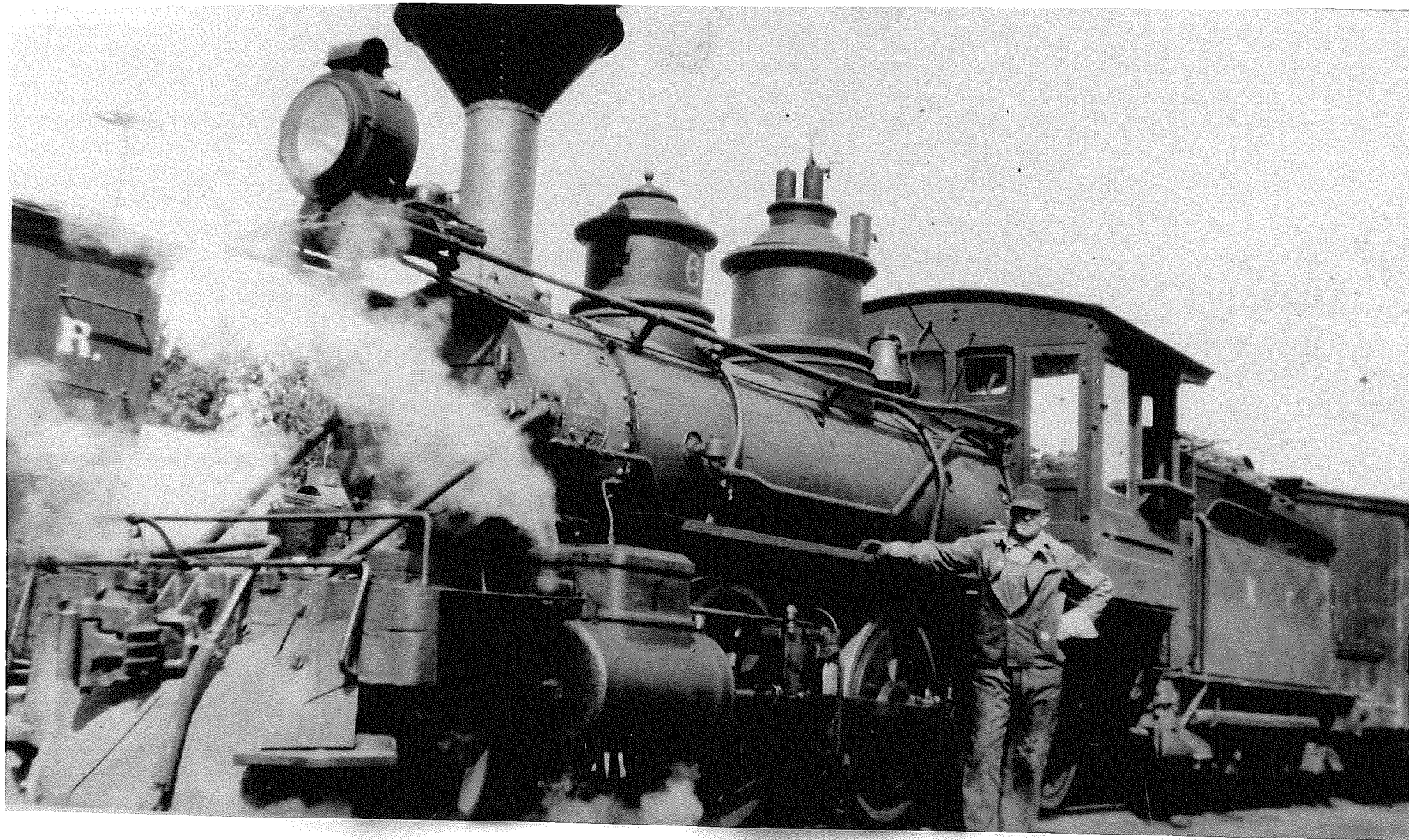


Photo No. 4 Nevada Central No. 6, c. 1938. Photo:
J.M. Hiskey Collection

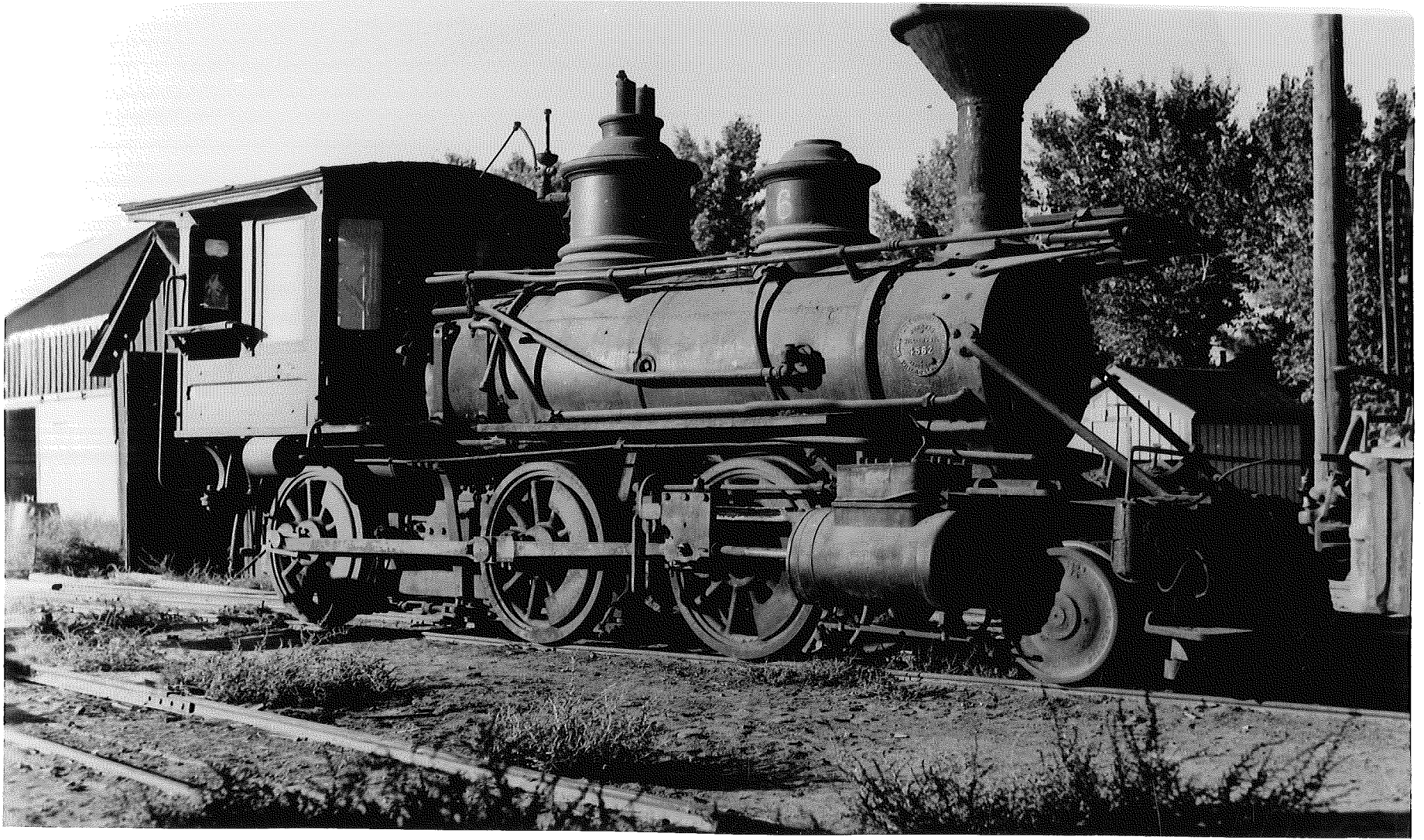


Photo No. 5 Nevada Central No. 6, c. 1938. Photo:
J.M. Hiskey Collection.



Photo No. 6 Nevada Central No. 6 Photo:
Holman Lenhart Collection.

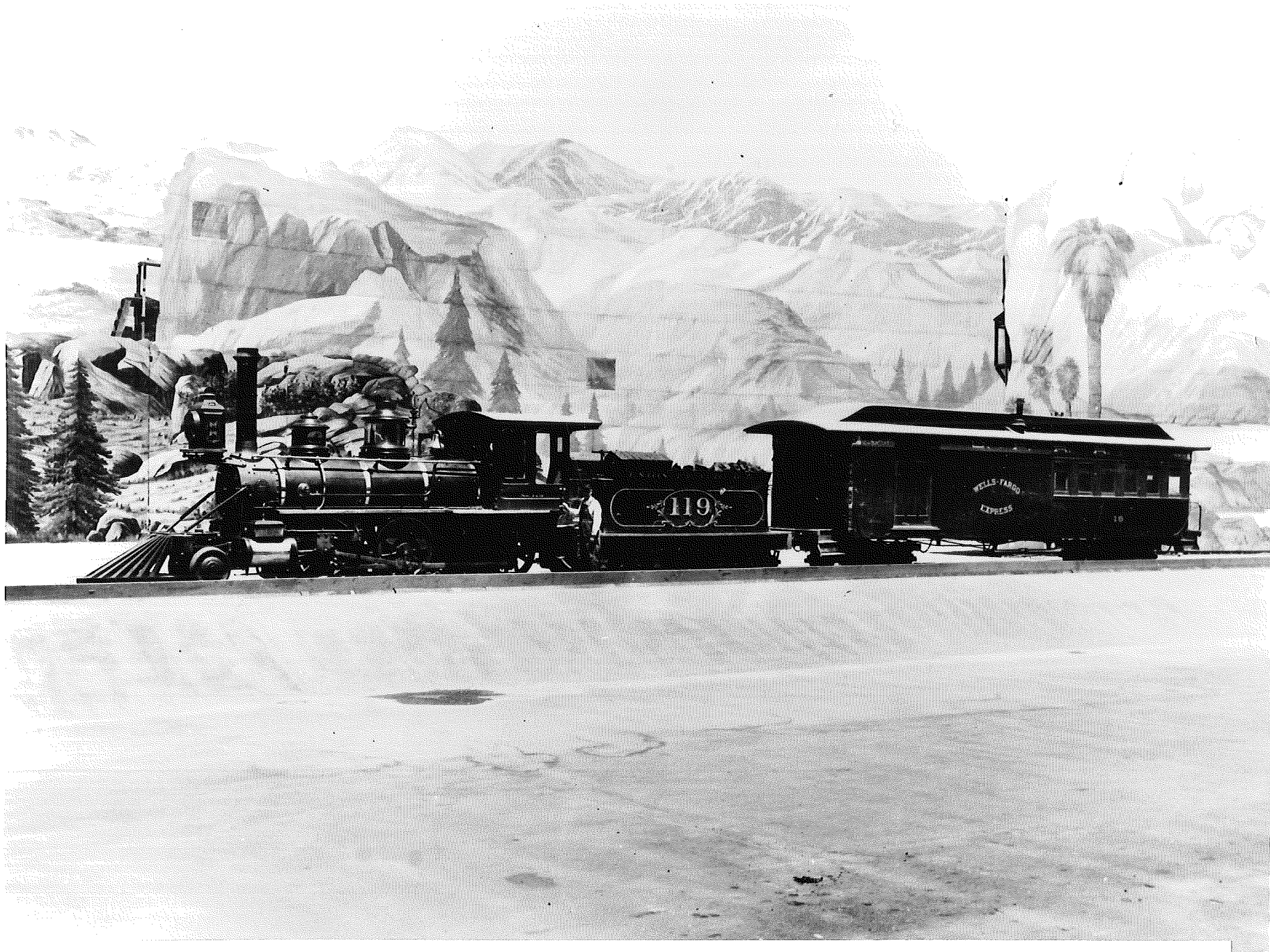


Photo No. 7 Nevada Short Line No.1, as the Union Pacific No. 119,
at the treasure Island Fair (1939-1940). Photo:
Roy Graves Collection.

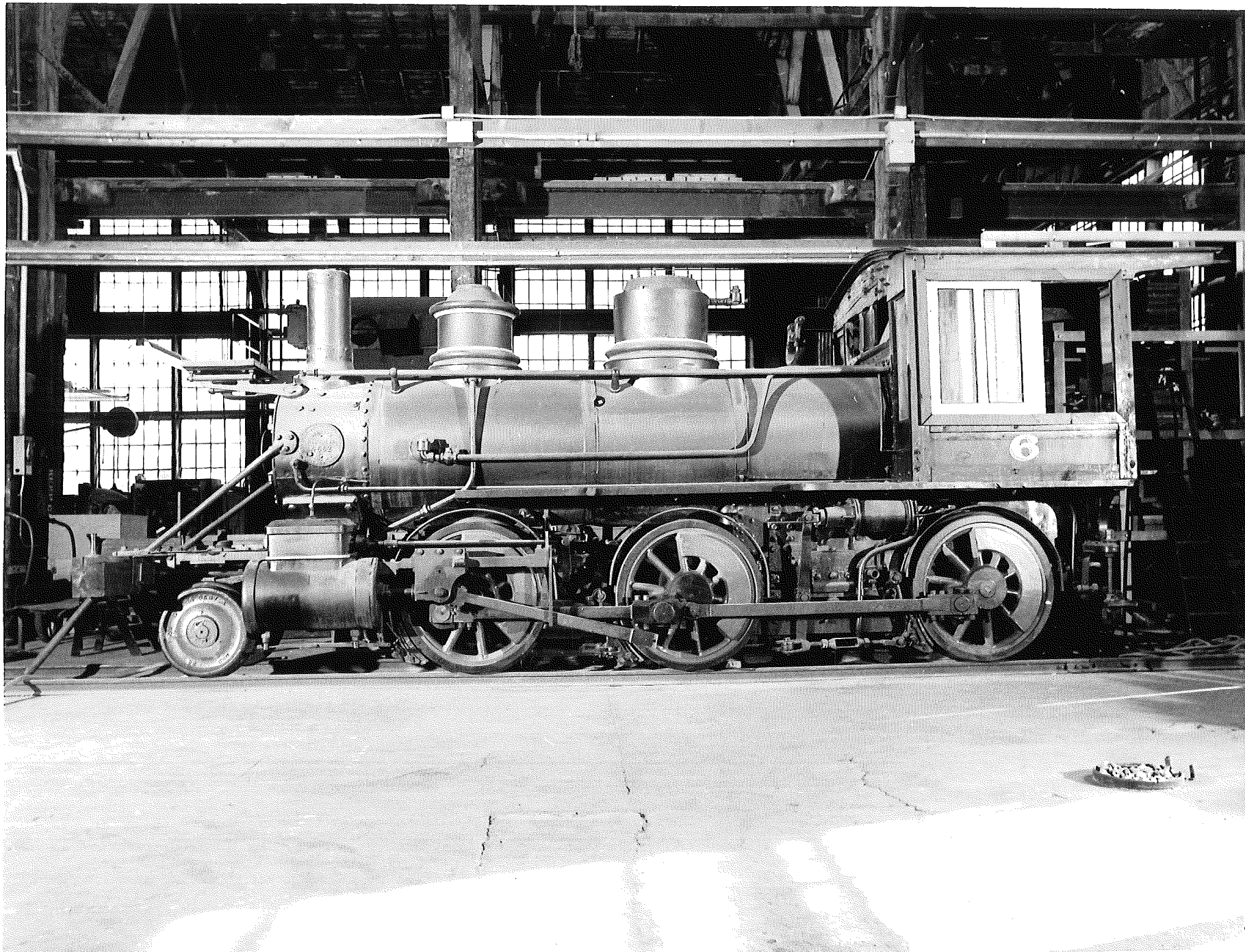


Photo No. 8 Locomotive as received at California State Railroad Museum,
Unit Shop, September 1977. Photo: CSRM.

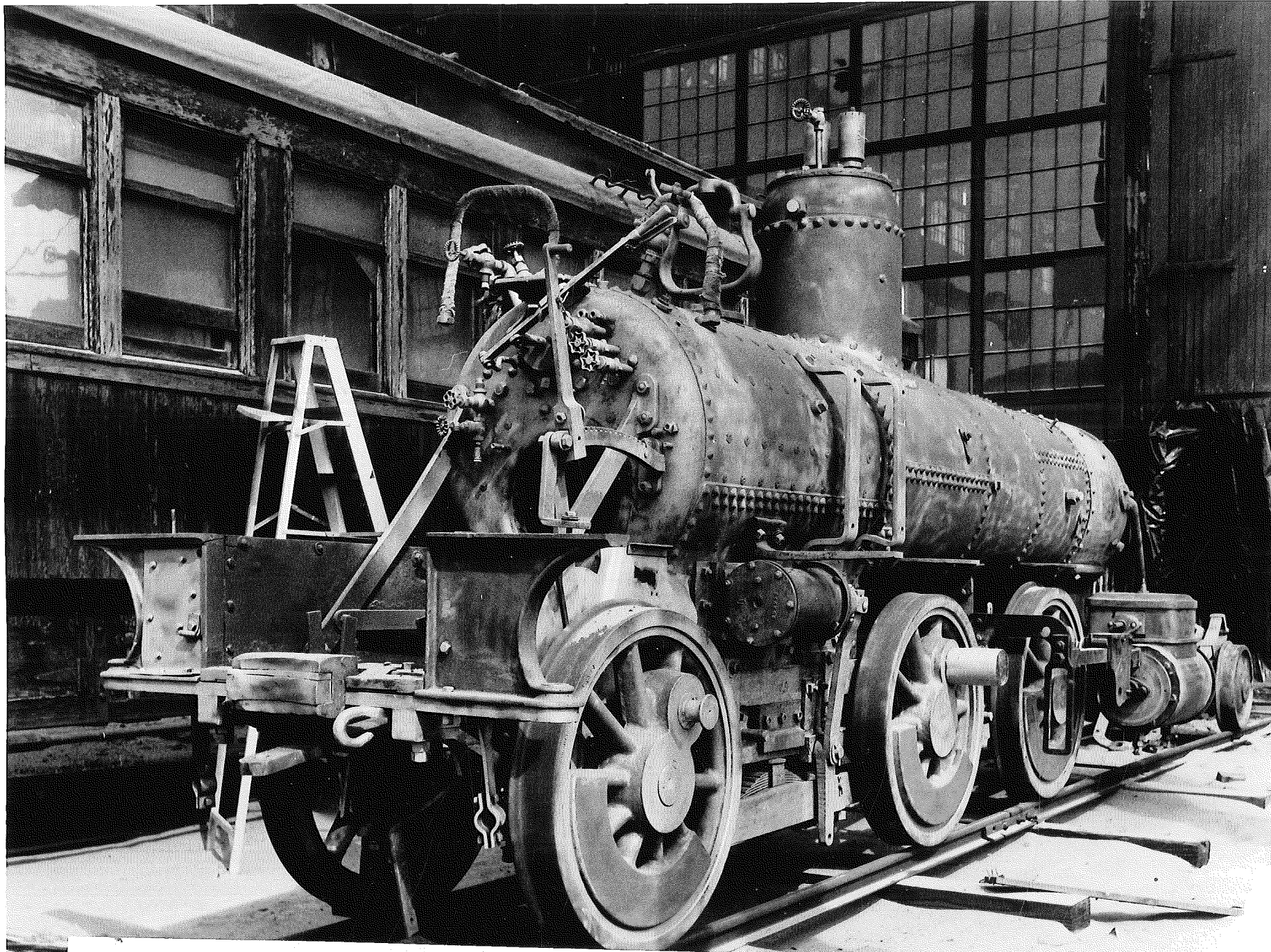


Photo No. 9 Locomotive getting sandblasted Photo: CSRM.



Photo No. 10 Boiler lagging being applied, April 1978.
Photo: CSRM.

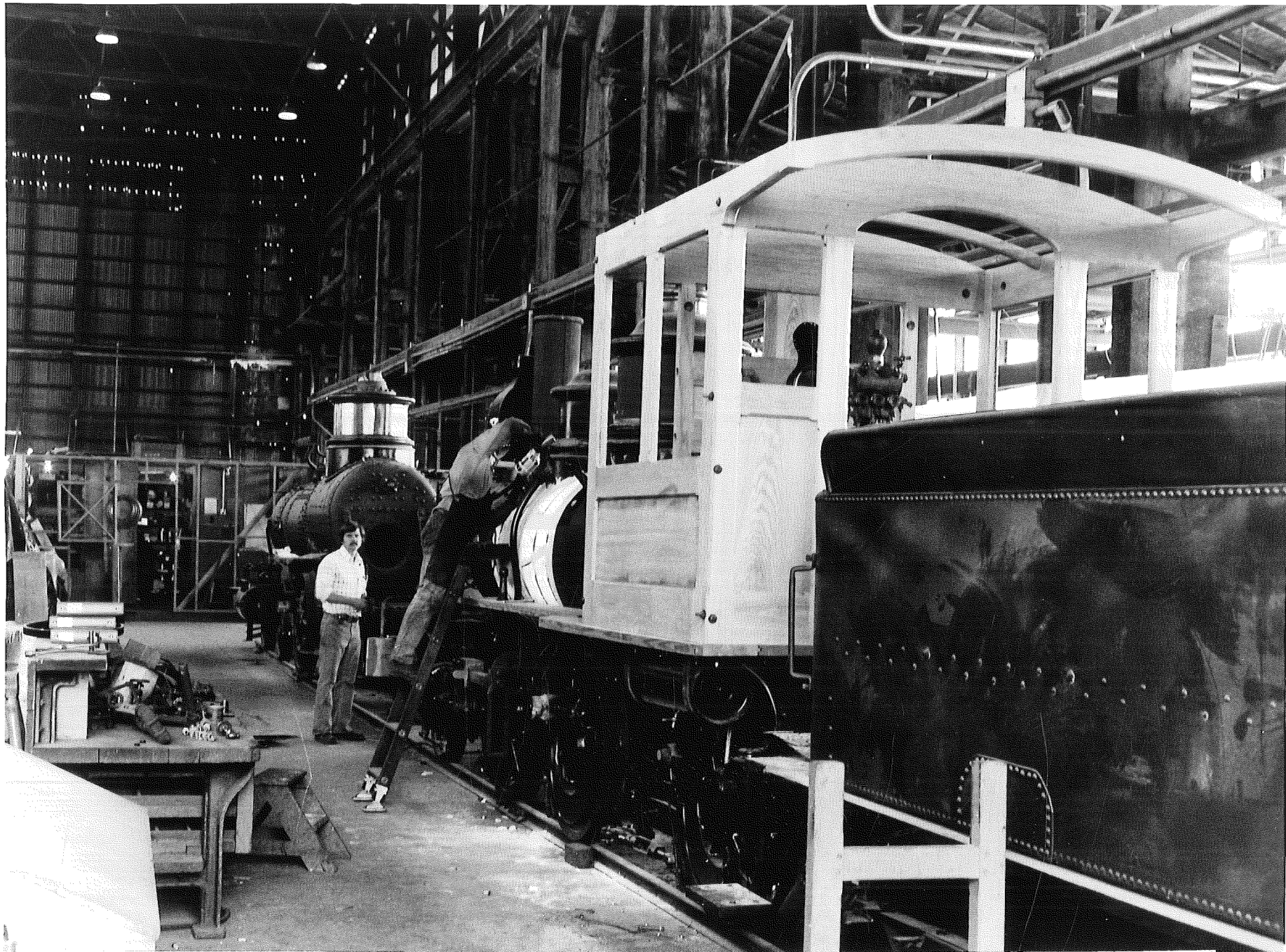


Photo No. 11 Cab in place. April 1978.
Photo: CSRM.

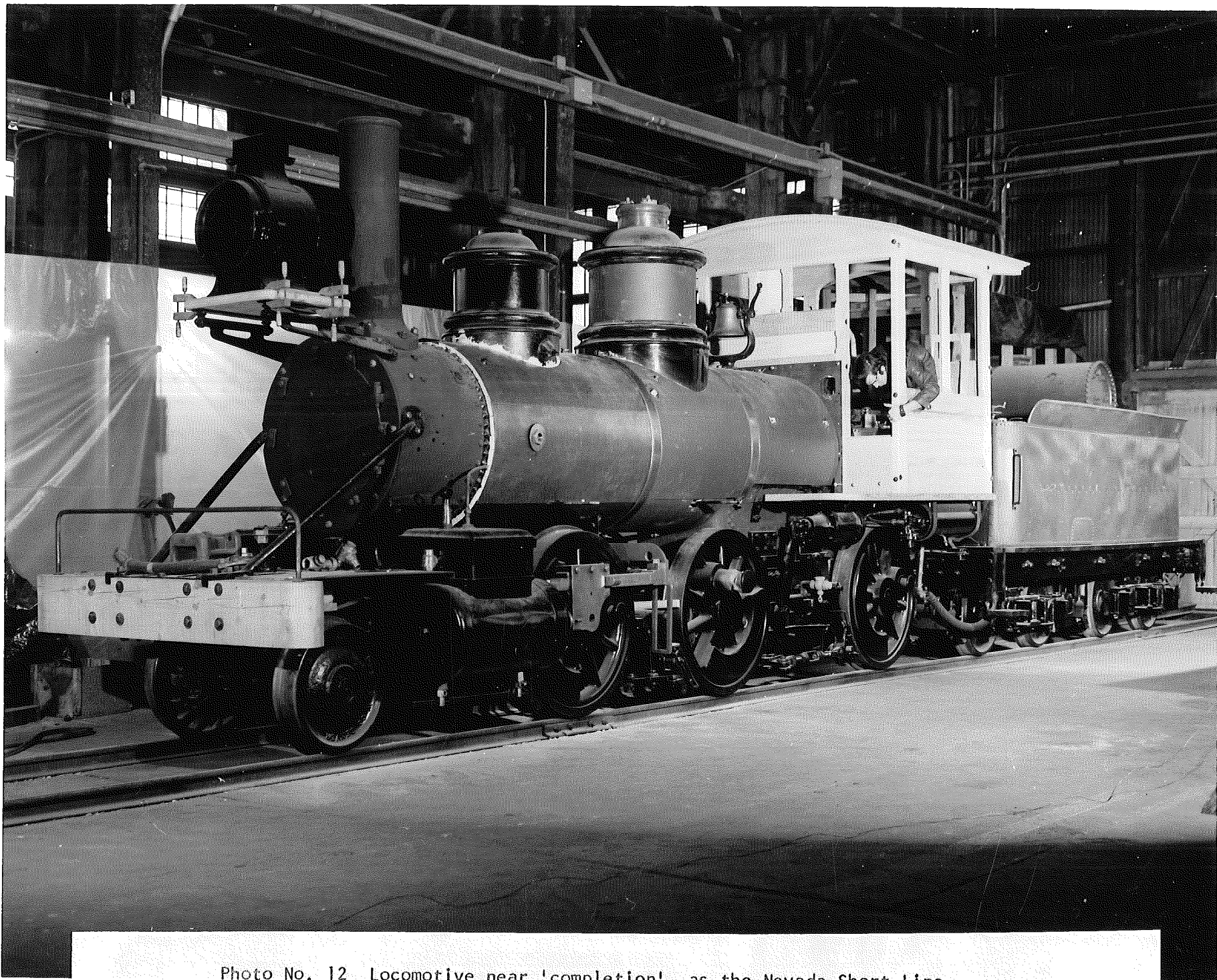


Photo No. 12 Locomotive near 'completion', as the Nevada Short Line
No. 1. April 1978. Photo: CSRM.

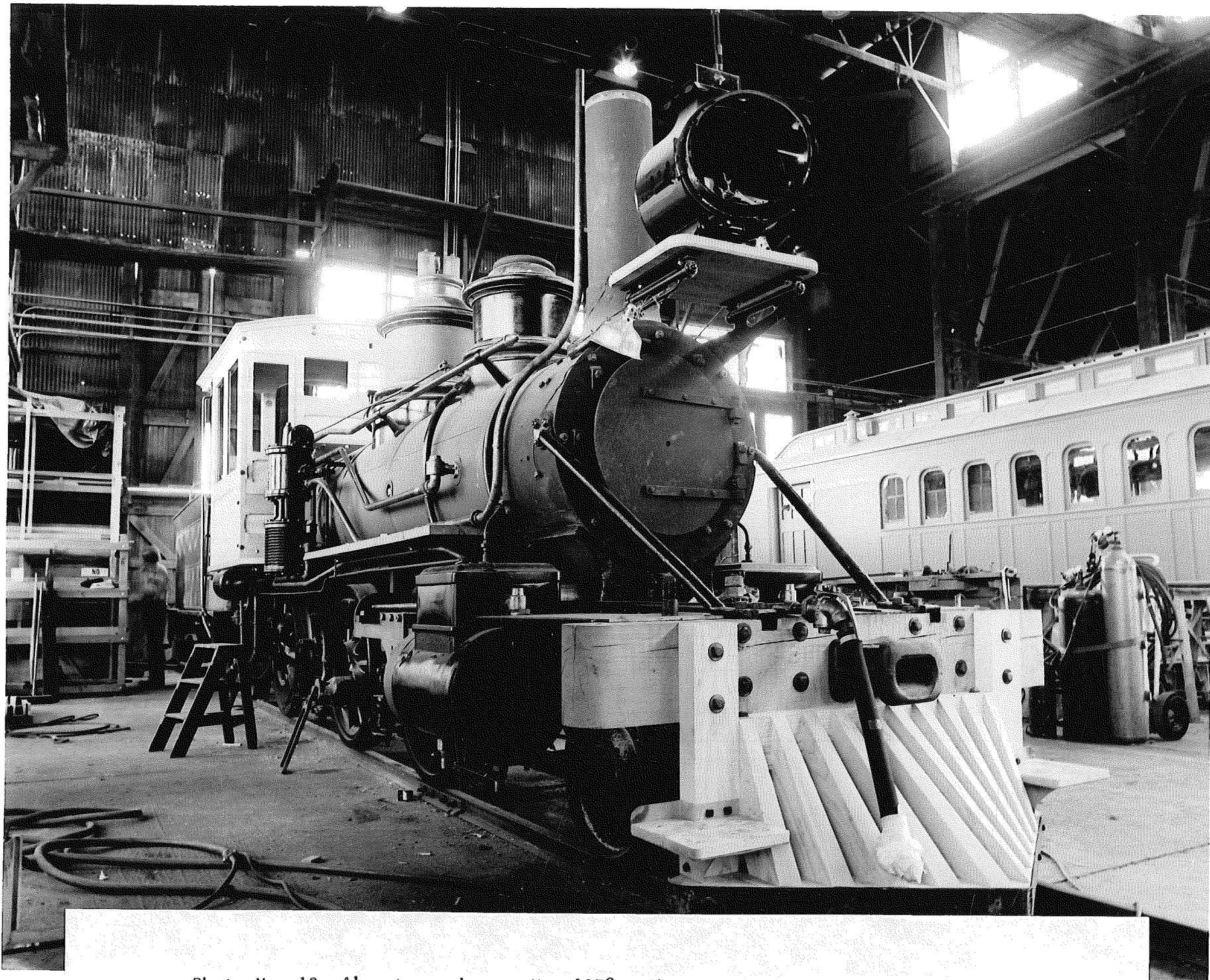


Photo No. 13 Almost complete. May 1978. Photo: CSRM.



Photo No. 14 Restoration completed on Baldwin No. 4562, as the Nevada Short Line No. 1, to it's 1920's appearance. June 1978.
Photo: CSRM.